CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, March 1, 1906.

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CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S.), and Bidding Sheets (B. S.) may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

Bids close.	Work.	Place.	On file.	See issue.
Mar.				
	*1—Paving	Augusta, Ga.	S.	2-15
	*1—Pumping plant	Harlingen, Tex.	S.	2- 1
	2—Boilers	Atlantic City, N. J.	S.	2-22
	3—Blasting ledge	Portsmouth, N.H.	S.	2- 8
	*5—Elevator	Grand Rapids, Mich.	Data.	1-18
	*5—Bridge	Boston, Mass.	S.	2- 8
	*5—Piers, etc.	Brunswick, Ga.	P. & S.	2-22
	*7—Sewer system	Gainesville, Fla.	S.	2- 8
	*7—Bridge	Providence, R. I.	S.	2-22
	*9—Cement	Nampa, Idaho	S.	2- 8
	*10—Two snagboats	Vicksburg, Miss.	P. & S.	1-11
	10—Light & water plant	Wynnewood, Ind. T.	P. & S.	2-22
	*10—Bridge	Pedricktown, N. J.	P. & S.	2-22
	*12—Lock	Rock Island, Ill.	P. S. & B. S.	2-22
	12—Railway	Transcontinental Ry.	S.	2-22
	*13—Powder tanks	Wash., D. C.	S. & B. S.	2- 8
	*15—Canal	Oregon	P. & S.	2- 8
	15—Vit. pipe sewers	Woodstock, Vt.	S. & B. S.	3- 1
	*16—Cement	Los Angeles, Cal.	S. & B. S.	2-15
	*17—Pump house, etc.	wash., D. C.	S.	2-22
	*19—Sand filters	Springfield, Mass.	P. & S.	3- 1
	*22—Crematory, etc.	Oswego, N. Y.	P. S. & B. S.	3- 1
	24—Turbo alternators	New York	S.	3- 1
	*30—Bridge	Port Huron, Mich.	P. & S.	2-15
	31—Timber wharf	Bremerton, Wash.	S.	3- 1
	31—Power plant	New York	S.	3- 1
	31—Quay wall	Bremerton, Wash.	S.	2-15
Apr.				
	*1—Garbage disposal	Auburn, N.Y.	S.	2-22
	*2—Port works	Chile	P. & S.	5- 4
	5—Wharves	Manila, P. I.	P. & S.	12-14
	*9—Wharf	Guantanamo, Cuba	P. & S.	2-22
May				
	4—Wharf sheds & Rys.	Manila, P. I.	P. & S.	3- 1
	— —Steel, etc.	Glendive, Mont.	P. & S.	2- 8

*Work advertised in Engineering News.

NOTE.—We are desirous of securing specifications and bidding sheets (and plans when not too bulky) of pending work for file in our New York office for the benefit of contractors or others who may be interested in the work. If more sets than one are sent us we shall be pleased to distribute these to contractors who ask for them. When the work is advertised in Engineering News a note that the plans are filed with us will be added to the advertisement without cost.

LIST OF CONTRACTS PENDING.

Bids close.	Work.	Place.	On file.	See issue.

LIGHT, HEAT AND POWER PLANTS.

Mar. 1. Lighting, Elkton, Md. ..... Feb. 22
Mar. 5. Electric lighting, Orange, N. J. ..... Feb. 8
Advertised, Eng. News, Feb. 8 and 15.
Mar. 6. Lighting plant, Crookston, Minn. ..... Feb. 22
Mar. 10. Electric light & water plant, Wynnewood, Ind. T. ..... Feb. 22
Mar. 15. Electric light plant, Bamberg, S. C. ..... Mar. 1
Apr. 4. Transmission line poles, Chicago, Ill. ..... Feb. 8
Advertised, Eng. News, Feb. 8.
Apr. 9. Light & power plant, Fullerton, Cal. ..... Mar. 1
Apr. 16. Light & power plant, New York, N. Y. ..... Feb. 22
No date. Gas pipe line, Cincinnati, O. ..... Feb. 15

BRIDGES.

Mar. 1. Bridge, New York, N. Y. ..... Feb. 22
Mar. 5. Bridges, Leavenworth, Kan. ..... Feb. 22
Mar. 5. Bridge, Boston, Mass. ..... Feb. 8
Advertised, Eng. News, Feb. 8 and 15.
Mar. 6. Bridge, New Rockford, N. Dak. ..... Feb. 8
Mar. 6. Bridge, Ft. Benton, Mont. ..... Feb. 8
Mar. 6. Bridges, Loup City, Neb. ..... Feb. 15
Mar. 6. Bridge, Washington, Ind. ..... Feb. 22
Mar. 6. Bridges, Kingston, Mo. ..... Feb. 22
Mar. 6. Bridges, Bloomfield, Ind. ..... Mar. 1
Mar. 6. Bridge, Racine, Wis. ..... Mar. 1
Mar. 7. Bridge, Nebraska City, Neb. ..... Mar. 1
Mar. 7. Bridge, Providence, R. I. ..... Feb. 22
Advertised, Eng. News, Feb. 22 and Mar. 1.
Mar. 7. Bridges, Tillamook, Ore. ..... Feb. 15
Mar. 8. Bridges, Columbus, Neb. ..... Mar. 1
Mar. 10. Bridge, Pedricktown, N. J. ..... Feb. 22
Advertised, Eng. News, Feb. 22 and Mar. 1.
Mar. 12. Bridge, Ottawa, Ont. ..... Feb. 22
Mar. 12. Bridge, Newport, Ind. ..... Feb. 22
Advertised, Eng. News, Feb. 15.
Mar. 12. Abutment pier, Bay City, Mich. ..... Mar. 1
Mar. 12. Bridges, Pierce, Neb. ..... Mar. 1
Mar. 13. Bridges, etc., Columbia City, Ind. ..... Mar. 1
Mar. 14. Bridge, Salem, Mass. ..... Mar. 1
Advertised, Eng. News, Mar. 1.
Mar. 30. Bridge, Port Huron, Mich. ..... Feb. 15
Advertised, Eng. News, Feb. 15 to Mar. 15.
Mar. 31. Bridge, Custer, S. Dak. ..... Jan. 25
Apr. 3. Bridge, Colfax, Wash. ..... Mar. 1
Apr. 4. Bridge, Nevada City, Cal. ..... Feb. 15

BUILDINGS.

Mar. 1. Pest-house, Evansville, Ind. ..... Feb. 15
Mar. 1. Addition, etc., Fayetteville, N. C. ..... Feb. 22
Mar. 5. Granite, Washington, D. C. ..... Jan. 25
Advertised, Eng. News, Jan. 25 to Feb. 15.
Mar. 5. Elevator, Grand Rapids, Mich. ..... Jan. 18
Advertised, Eng. News, Jan. 18 and 25.
Mar. 5. Schools, New York, N. Y. ..... Mar. 1
Mar. 6. Church, Champaign, Ill. ..... Mar. 1
Mar. 6. Doors, New Orleans, La. ..... Feb. 15
Advertised, Eng. News, Feb. 15 and 22.
Mar. 7. Plumbing, Plattsburg, N. Y. ..... Feb. 15
Mar. 10. Building, Minneapolis, Minn. ..... Feb. 22
Mar. 13. Library, Indianapolis, Ind. ..... Feb. 22
Mar. 14. Wiring, Ogden, Utah. ..... Feb. 22
Advertised, Eng. News, Feb. 22 and Mar. 1.
Mar. 15. Heating, Ogden, Utah. ..... Feb. 22
Advertised, Eng. News, Feb. 22 and Mar. 1.
Mar. 15. Church, Zanesville, O. ..... Feb. 1
Mar. 15. School, Cooperstown, N. Y. ..... Mar. 1
Mar. 15. Building, heating, Lawrence, Kan. ..... Mar. 1
Mar. 20. Theater, Memphis, Tenn. ..... Mar. 1
Mar. 20. Structural material, New York, N. Y. ..... Mar. 1
Advertised, Eng. News, Mar. 1 to 15.
Mar. 26. Court-house, Fresno, Cal. ..... Feb. 15
Mar. 27. School, Madison, Wis. ..... Mar. 1
Mar. 30. School, Fullerton, Cal. ..... Feb. 22
Apr. 1. Laundry, Warren, O. ..... Feb. 22
Apr. 3. Building, Pierre, S. Dak. ..... Feb. 15

WATER SUPPLY AND IRRIGATION.

Mar. 1. Pump, Duluth, Minn. ..... Feb. 22
Mar. 1. Pipe, hydrants, etc., Hebron, Ill. ..... Feb. 22
Advertised, Eng. News, Feb. 22.
Mar. 1. Pumping plant, Harlingen, Tex. ..... Feb. 1
Advertised, Eng. News, Feb. 1 and 8.
Mar. 2. Curb boxes, Youngstown, O. ..... Feb. 22
Advertised, Eng. News, Feb. 22.
Mar. 2. Gate valves, Youngstown, O. ..... Feb. 22
Advertised, Eng. News, Feb. 22.
Mar. 2. Hydrants, Youngstown, O. ..... Feb. 22
Advertised, Eng. News, Feb. 22.
Mar. 2. Cast-iron pipe, Youngstown, O. ..... Feb. 22
Advertised, Eng. News, Feb. 22.
Mar. 2. Water meters, Youngstown, O. ..... Feb. 22
Advertised, Eng. News, Feb. 22.
Mar. 2. Corporation cocks, Youngstown, O. ..... Feb. 22
Advertised, Eng. News, Feb. 22.
Mar. 2. Pig lead, Youngstown, O. ..... Feb. 22
Advertised, Eng. News, Feb. 22.
Mar. 2. Boilers, Atlantic City, N. J. ..... Feb. 22
Advertised, Eng. News, Feb. 22 and Mar. 1.
Mar. 3. Bonds, Osceola, Ark. ..... Feb. 22
Advertised, Eng. News, Feb. 15 and 22.
Mar. 3. Water pipe, Washington, D. C. ..... Feb. 15
Advertised, Eng. News, Feb. 15 and 22.
Mar. 5. Water main, Fargo, N. Dak. ..... Feb. 22
Mar. 6. Pump, boiler, etc., Meaford, Ont. ..... Feb. 22
Mar. 6. Water tank, Parkridge, Ill. ..... Feb. 1
Mar. 6. Water-works, etc., Golden, Colo. ..... Mar. 1
Mar. 14. Water pipe, Perth Amboy, N. J. ..... Mar. 1
Advertised, Eng. News, Mar. 1.
Mar. 14. Concrete conduit, Richmond, Va. ..... Feb. 22
Advertised, Eng. News, Feb. 22 and Mar. 1.
Mar. 17. Water-works plant, Arcadia, Fla. ..... Feb. 22
Advertised, Eng. News, Feb. 22 to Mar. 15.
Mar. 17. Pump house, machinery, Wash., D. C. ..... Feb. 22
Advertised, Eng. News, Feb. 15 and 22.
Mar. 19. Sand filters, Springfield, Mass. ..... Mar. 1
Advertised, Eng. News, Mar. 1 to 15.
Mar. 19. Water-works, Glendive, Mont. ..... Mar. 1
Advertised, Eng. News, Mar. 1 to 15.
Mar. 20. Concrete conduit, Dallas, Tex. ..... Mar. 1
Advertised, Eng. News, Mar. 1 and 8.
Mar. 20. Water system, Apalachicola, Fla. ..... Feb. 22
Advertised, Eng. News, Feb. 22 and Mar. 1.
Mar. 21. Water system, Marlow, Ind. T. ..... Mar. 1
Advertised, Eng. News, Mar. 1 and 8.
Mar. 23. Laying cast-iron pipe, Cincinnati, O. ..... Mar. 1
Advertised, Eng. News, Mar. 1 to 15.
Mar. 23. Water system, Belle Plain, Ind. ..... Mar. 1
Mar. 27. Water-works & sewer sys., Franklin, Va. ..... Mar. 1
Advertised, Eng. News, Mar. 1 to 22.

SEWERAGE.

Mar. 1. Sewer, New York, N. Y. ..... Feb. 22
Mar. 5. Sewer, Emmetsburg, Ia. ..... Feb. 22
Mar. 5. Sewers, drains, Jacksonville, Fla. ..... Feb. 1
Mar. 6. Sewer system, Toronto, Ont. ..... Feb. 1
Advertised, Eng. News, Feb. 1 to 15.
Mar. 6. Sewer, Salem, O. ..... Feb. 22
Mar. 7. Sewer system, Gainesville, Fla. ..... Feb. 8
Advertised, Eng. News, Feb. 8 to Mar. 1.
Mar. 10. Sewer, Norwood, O. ..... Feb. 22
Mar. 14. Improving drain, Roanoke, Va. ..... Mar. 1
Mar. 15. Sewer system, Mount Carmel, Pa. ..... Mar. 1
Advertised, Eng. News, Mar. 1 and 8.
Mar. 15. Sewer, Woodstock, Vt. ..... Mar. 1
Mar. 16. Sewer, Lebanon, O. ..... Mar. 1
Mar. 19. Sewers, Washington, D. C. ..... Mar. 1
Advertised, Eng. News, Mar. 1 and 8.
Mar. 19. Sewer system, Oklahoma City, Okla. ..... Mar. 1
Mar. 19. Sewers, Cobleskill, N. Y. ..... Feb. 22
Mar. 20. Sewers, Apalachicola, Fla. ..... Feb. 22
Advertised, Eng. News, Feb. 22 and Mar. 1.
Mar. 20. Sewerage, Camden, N. J. ..... Mar. 1
Mar. 23. Sewers, Green Bay, Wis. ..... Feb. 22

STREETS AND ROADS.

Mar. 1. Brick & asphalt paving, S. Bend, Ind. ..... Feb. 22
Mar. 1. Brick paving, Des Moines, Ia. ..... Feb. 22
Mar. 1. Paving, grading, New York, N. Y. ..... Feb. 22
Mar. 1. Pike road, Clinton, Tenn. ..... Feb. 15
Mar. 1. Paving, curbing, Manistee, Mich. ..... Feb. 15
Mar. 1. Paving, Augusta, Ga. ..... Feb. 15
Advertised, Eng. News, Feb. 15 and 22.
Mar. 2. Asphalt paving, Des Moines, Ia. ..... Feb. 15
Mar. 2. Asphalt paving, Des Moines, Ia. ..... Feb. 22
Mar. 3. Asphalt paving, Seattle, Wash. ..... Feb. 15
Mar. 5. Gravel roads, Rockville, Ind. ..... Feb. 15
Mar. 5. Gravel roads, Decatur, Ind. ..... Feb. 15
Mar. 5. Granite paving, Atlanta, Ga. ..... Feb. 22
Mar. 5. Repaving, Great Falls, Mont. ..... Feb. 22
Mar. 5. Brick paving, Montgomery, Ala. ..... Feb. 22
Mar. 5. Steam roller, St. Paul, Minn. ..... Mar. 1
Mar. 5. Paving, Bay City, Mich. ..... Mar. 1
Mar. 5. Gravel roads, Valparaiso, Ind. ..... Mar. 1
Mar. 5. Macadamizing, St. Paul, Minn. ..... Mar. 1
Mar. 5. Street paving, Hot Springs, Ark. ..... Mar. 1
Mar. 6. Macadamizing, New York, N. Y. ..... Feb. 22
Mar. 6. Macadam road, Versailles, Ind. ..... Feb. 15
Mar. 7. Grading, Cleveland, O. ..... Feb. 22
Mar. 7. Paving, Meadville, Pa. ..... Mar. 1
Advertised, Eng. News, Mar. 1.
Mar. 8. Macadam roads, Madison, Ind. ..... Feb. 22
Mar. 13. Asphalt paving, Crookston, Minn. ..... Feb. 8
Mar. 15. Brick paving, Corning, N. Y. ..... Feb. 22
Advertised, Eng. News, Feb. 22 and Mar. 1
Mar. 15. Road, Peekskill, N. Y. ..... Feb. 8
Advertised, Eng. News, Feb. 8.
Mar. 16. Paving, Spartanburg, S. C. ..... Mar. 1
Advertised, Eng. News, Mar. 1 and 8.
Mar. 17. Grading and macadamizing, Shelby, Mich. ..... Mar. 1
Mar. 19. Paving, Cobleskill, N. Y. ..... Feb. 22
Mar. 20. Paving, Lake Charles, La. ..... Feb. 22
Apr. 2. Road, Leavenworth, Wash. ..... Feb. 8
No date. Grading, Baltimore, Md. ..... Feb. 15
Advertised, Eng. News, Feb. 15 and 22.
No date. Sidewalks, Oberlin, Kan. ..... Feb. 22

MISCELLANEOUS CONTRACTS.

Mar. 2. Soft pig lead, Youngstown, O. ..... Feb. 22
Mar. 2. Dredging, Savannah, Ga. ..... Feb. 1
Advertised, Eng. News, Feb. 1 to Mar. 1.
Mar. 2. Repairing wall, Savannah, Ga. ..... Feb. 1
Advertised, Eng. News, Feb. 1 to Mar. 1.
Mar. 3. Blasting ledge, Portsmouth, N. H. ..... Feb. 8
Mar. 3. Supplies, Panama. ..... Feb. 22
Mar. 3. Gun carriage, Washington, D. C. ..... Feb. 22
Mar. 5. Piers, dredging, etc., Brunswick, Ga. ..... Feb. 22
Advertised, Eng. News, Feb. 15 and 22.
Mar. 5. Stone crusher, etc., St. Cloud, Minn. ..... Feb. 15
Mar. 6. Tunnel, Boston, Mass. ..... Feb. 15
Advertised, Eng. News, Feb. 15 and 22.
Mar. 6. Dredging, Rock Island, Ill. ..... Feb. 8
Mar. 7. Flushing machines, Baltimore, Md. ..... Feb. 22
Mar. 9. Cement, Nampa, Idaho. ..... Feb. 8
Advertised, Eng. News, Feb. 8 to Mar. 1.
Mar. 10. Electric railway, Baltimore, Md. ..... Feb. 8
Advertised, Eng. News, Feb. 8 to Mar. 1.
Mar. 10. Two snagboats, Vicksburg, Miss. ..... Jan. 11
Advertised, Eng. News, Jan. 11-18, Feb. 1-8.
Mar. 10. Railway construction, Canadian Pac. Ry. ..... Feb. 22
Mar. 12. Railway, Transcontinental Ry. ..... Feb. 22
Mar. 12. Steel bars, Glendive, Mont. ..... Feb. 22
Advertised, Eng. News, Feb. 15 to Mar. 8.
Mar. 12. Lock, Rock Island, Ill. ..... Feb. 22
Advertised, Eng. News, Feb. 15 to Mar. 8.
Mar. 13. Powder tanks, Washington, D. C. ..... Feb. 8
Advertised, Eng. News, Feb. 8 and 15.
Mar. 14. Ditches, Cleveland, O. ..... Feb. 22
Mar. 14. Dredging, Grand Rapids, Mich. ..... Mar. 1
Mar. 15. Canal, Oregon ..... Feb. 8
Advertised, Eng. News, Feb. 8.
Mar. 15. Rehandling machine, Philadelphia, Pa. ..... Feb. 15
Advertised, Eng. News, Feb. 15 to Mar. 8.
Mar. 15. Railway, Wisconsin Rapid Transit Co. ..... Feb. 15
Mar. 16. Cement, Los Angeles, Cal. ..... Feb. 15
Advertised, Eng. News, Feb. 15 to Mar. 8.
Mar. 16. Breakwater, Cleveland, O. ..... Mar. 1
Mar. 22. R. R. tunnel, Detroit, Mich. ..... Mar. 1
Mar. 22. Garbage crematory, Oswego, N. Y. ..... Feb. 22
Advertised, Eng. News, Feb. 22 to Mar. 15.
Mar. 26. Dredges, Panama. ..... Feb. 22
Mar. 27. Cement, Wheeling, W. Va. ..... Mar. 1
Advertised, Eng. News, Mar. 1 to 22.
Mar. 28. Dredging, New Orleans, La. ..... Mar. 1
Advertised, Eng. News, Mar. 1 to 22.
Mar. 30. Spillway, San Francisco, Cal. ..... Mar. 1
Advertised, Eng. News, Mar. 1 to 22.
Mar. 30. Lock gates, Pittsburg, Pa. ..... Mar. 1
Advertised, Eng. News, Mar. 1 to 22.
Mar. 30. Slip, Honolulu, H. I. ..... Mar. 1
Mar. 31. Timber wharf, Bremerton, Wash. ..... Mar. 1
Mar. 31. Dredging, New London, Conn. ..... Mar. 1
Advertised, Eng. News, Mar. 1 to 22.
Mar. 31. Ditch, etc., Lewiston, Idaho. ..... Mar. 1
Advertised, Eng. News, Mar. 1 to 29.
Mar. 31. Quay wall, Bremerton, Wash. ..... Feb. 15
Apr. 1. Garbage disposal, Auburn, N. Y. ..... Feb. 22
Advertised, Eng. News, Feb. 22 to Mar. 8.
Apr. 2. Port works, Chile (Foreign) ..... May 4
Advertised, Eng. News, April 1, 1906.
Apr. 3. Ditch, Spirit Lake, Ia. ..... Jan. 18
Apr. 5. Wharves, Manila, P. I. ..... Dec. 14
Apr. 9. Wharf, Guantanamo, Cuba. ..... Feb. 22
Advertised, Eng. News, Feb. 15 and 22.
Apr. 9. Street signs, Schenectady, N. Y. ..... Mar. 1
Advertised, Eng. News, Mar. 1.
May 1. Steel dock, Chile (Foreign) ..... Nov. 9
May 4. Wharf sheds & Rys., Manila, P. I. ..... Mar. 1
No date. Brick, terra cotta, Lowell, Mass. ..... Mar. 1
Advertised, Eng. News, Mar. 1.
No date. Steam shovel excavation, Towanda, Pa. ..... Feb. 1
No date. Cement, Chicago, Ill. ..... Feb. 1
No date. Steel, cast-iron, etc., Glendive, Mont. ..... Feb. 8
No date. Grading, Baltimore, Md. ..... Feb. 15
Advertised, Eng. News, Feb. 15 and 22.
No date. Concrete hotel, Porto Rico ..... Feb. 15
Advertised, Eng. News, Feb. 15.

CIVIL SERVICE EXAMINATIONS.

Mar. 7. Laboratory Asst., Washington, D. C. ..... Feb. 22
Mar. 14. Aid, Washington, D. C. ..... Feb. 8
Mar. 15. Arch. Draftsman, New York, N. Y. ..... Mar. 1
Mar. 17. Architectural Designer, Albany, N. Y. ..... Feb. 22
Mar. 17. Asst. Engineer, Albany, N. Y. ..... Feb. 22
Mar. 17. Auditor, Highway Accts., Albany, N. Y. ..... Feb. 22
Mar. 17. Bldg. Inspector, Albany, N. Y. ..... Feb. 22
Mar. 17. Chief Engineer, Albany, N. Y. ..... Feb. 22
Mar. 17. Highway Insp., Albany, N. Y. ..... Feb. 22
Mar. 21. Topographic Dftsman, Washington, D. C. ..... Feb. 22
Mar. 21. Arch. Draftsman, New York, N. Y. ..... Mar. 1
Mar. 21. Surveyor, Philippine Service. ..... Mar. 1
Mar. 21. C. E. Student, Washington, D. C. ..... Mar. 1
Apr. 18. Scientific Asst., Washington, D. C. ..... Mar. 1

RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

ATLANTIC COAST LINE.—The PENN BRIDGE CO., Beaver Falls, Pa., has been awarded contract for grading, sewerage, water supply, brick and steel buildings and all other work in connection with constructing new locomotive works and car shops at Waycross, Ga., except machinery and equipment. Plant will include a roundhouse, oil house, storehouse, machine and erecting shop, blacksmith shop, coach shop, paint shop, planing mill, foundry, pattern storehouse, dry kiln and frame freight car repair shop. Proposals submitted were for plant complete, except machinery and equipment. Contract price is about $400,000. R. E. Smith, Gen. Supt. Motive Power, Wilmington, N. C. (Advertised in Engineering News from Jan. 4 to Jan. 18.)

BANGOR TERMINAL.—P. H. Coombs, Ch. Engr., Bangor, Me., writes us that survey is completed for this railway, but that no progress will be made, probably, toward construction or awarding contracts until spring. The line is to be six miles in length, running from Bangor to Hermon, Me.

BALTIMORE & ANNAPOLIS SHORT LINE.—J. Wilson Brown, Pres. and Gen. Mgr., Baltimore, Md., informs us, in regard to talked-of plan to convert this railroad from a steam to an electric line, that "the change is at present not more than a future possibility, or perhaps I should say probability."

BRITISH COLUMBIA, NORTHERN & ALASKA.—Robertson & Robertson, Solicitors, Vancouver, B. C., inform us that they are applying to British Columbia Legislature for incorporation for this company, which will build from Vancouver, B. C., to northern boundary of this province, via the Chilcoten Valley and the Fraser River. Preliminary surveys are to be started in the spring.

BROOKVILLE & MAHONING.—W. W. Henshey, Ch. Engr., Brookville, Pa., informs us that the contract which was noted last week as having been awarded for 21 miles of construction, to MILLER CONSTRUCTION CO., Franklin, Pa., is for grading, masonry, placing of pipe, track laying and ballasting, and does not include furnishing of cast iron sewer pipe, steel bridges and viaducts. The contract for furnishing and erecting steel work will be awarded to some bridge concern, the name of which will be announced in a short time. The culvert will be furnished by this company.

BRUNSWICK, BROAD RUN & WOLFSVILLE.—This company has been incorporated in Maryland to build a steam or electric line from a point near Brunswick, in Frederick County, Md., to Wolfsville via Petersville, Burkettsville and Bull Run, about 20 miles. The company will have $30,000 capital, which may be increased to $200,000. The incorporators are C. C. F. Bent, William Schnaffer, Dr. Levin West, Outerbridge Horsey and Lewis H. Bowlus, of Brunswick, Md.

BURR'S FERRY, BROWNDEL & CHESTER.—John H. Kirby, Pres., at Houston, Tex., has stated that this company proposes to build a road from Burr's Ferry to Chester, Tex., 80 miles, passing through Rockland, Aldridge, Bevilport, Browndel and Burkeville. The line has been surveyed from Rockland to Aldridge, eight miles, and is under survey from the latter point to Browndel, 30 miles. Grading is in progress on the first eight miles. P. G. Omohundro, Beaumont, Tex., is Ch. Engr.; J. A. Turner is Gen. Supt. and Purchasing Agt., at Rockland, Tex. Noted on Jan. 18.

BIRMINGHAM & MISSISSIPPI SOUTHERN.—Company has applied for a charter to build and operate a railway between Baton Rouge, La., and Birmingham, Ala., with headquarters at Hattiesburg, Miss. The promoters are ex-Governor A. H. Longino, former Secretary of State John J. Coman and A. J. Hackett, of Jackson, Miss.; A. O. Gibson, of Birmingham; E. F. Ballard, of Waynesboro, Miss.; D. C. Dunlap, of Chicago; D. E. McInnis, Howard C. Lea, Will A. Aaron, M. Hemphill, T. O. Watkins, R. C. Oliver and Lewis H. Bell, of Hattiesburg, Miss. Another report states that the title of the company will be the Birmingham & South Western Mississippi Ry. Co.

CHARLESTON, PARKERSBURG & WESTERN.—C. P. Peyton, Ch. Engr., Charleston, W. Va., advises us that eight miles of line are located and that right-of-way is being secured. The company expects to let contracts this season. The line will be about 60 miles long and will be built from Charleston to Sissonsville, Spencer, Elizabeth and Parkersburg. A. S. Alexander, of Charleston, W. Va.

CHICAGO, ROCK ISLAND & PACIFIC.—J. B. Berry, Ch. Engr., Chicago, advises us, in regard to Kansas City, Mo., depot grounds, that "the general lay-outs of tracks, buildings, etc., for Kansas City Union Depot, have all been prepared. Architects are now busy working on plans for buildings. So far six roads are interested: Union Pacific Railroad, Frisco System, Rock Island Railway, Santa Fe Railway, Milwaukee & St. Paul Railway, and Chicago & Alton Ry. We can not at present say anything about who the architects are. Up to date I have prepared all the plans in connection with the passenger station and connecting tracks."

DELAWARE, LACKAWANNA & WESTERN.—We are officially informed that WILLIAM GRACE & CO., 1 Madison Ave., New York, have been awarded contract for Bergen tunnel, in New Jersey.

ERIE.—It is reported that this company has officially informed the municipal authorities of Newark, N. J., that plans and surveys have been completed for the elevation of its tracks on the Newark and Paterson branch and the Greenwood Lake division. All grade crossings in Newark will be abolished and a new passenger station built. The cost of the work is estimated at $1,500,000. The city will be asked to assume part of this.

FLORIDA EAST COAST.—Plans and specifications for the extensive terminal facilities to be provided at Key West, Fla., have been prepared, it is stated. Several millions of dollars will be expended in construction work, including the erection of warehouses, docks, terminal stations, etc. The terminal facilities will be located on land now covered by from five to 25 ft. of water and nearly a mile from the shore-line proper. J. R. Parrott, St. Augustine, Fla., is Gen. Mgr.

GULF, BROWNWOOD & CISCO.—We are officially advised that engineers are now in the field locating line for this railroad, from Brownwood to May, Rising Star and Cisco, 52 miles. Right-of-way and depot grounds are donated and also $120,000 in cash. G. H. Connell is Pres. and F. H. Peters is Ch. Engr., both at Fort Worth, Tex.

GRAND TRUNK PACIFIC.—In regard to President Charles M. Hay's announcement that Teck's Inlet and Kaicus Island, 30 miles south of Port Simpson, B. C., had been selected for the Grand Trunk Pacific Ry.'s Pacific coast terminals, we are informed by Henry Phillips, Secy., at Montreal, Que., that date for commencement of work has not been determined. The G. T. P. will be 4,500 miles long, extending from Moncton to Quebec, Winnipeg, Edmonton and Port Simpson. B. B. Kelliher is Ch. Engr., at Montreal.

The Grand Trunk Pacific Branch Co. has made application to the Dominion Parliament for a charter and incorporation for the purpose of building branch feeders for the G. T. P. main line. The following are the lines for which incorporation is sought: From Moncton to Halifax; from a point on the Transcontinental Ry. to St. John, N. B.; from Montreal to a junction with the Transcontinental; from Ottawa to a junction with the Transcontinental; from North Bay to a junction with the Transcontinental; from the Transcontinental northeast from Fort William to a junction with the Grand Trunk Ry., north of Toronto, with the right to pass through or reach by spur line Sault Ste. Marie or Sudbury or both; from and around Winnipeg through surrounding districts, and to boundaries of Manitoba subject to the approval of the Governor General in Council; from Brandon to a junction with the Grand Trunk Pacific Ry.; from Brandon to the boundary line between Canada and the United States; from Brandon to Carberry; from Yorkton to a junction with the Grand Trunk Pacific Ry.; from Regina to a junction with the Grand Trunk Pacific Ry.; from Regina to the boundary line between Canada and the United States; from Prince Albert to a junction with the Grand Trunk Pacific Ry.; from Battleford to a junction with the Grand Trunk Pacific Ry.; from Calgary to a junction with the Grand Trunk Pacific Ry. at its fourth terminal in or in the vicinity thereof; from Calgary to a junction with the Grand Trunk Pacific at its fifth terminal; from Calgary to boundary line between Canada and the United States; from Vancouver to the junction of the Grand Trunk Pacific, or to a junction with the Pacific, Northern & Omenaca Ry., or both; from a point on the north shore of Vancouver Island southeasterly and along the western side of the island; from Dawson to a junction with the G. T. P.; from the terminals of the lines running northerly to Hudson Bay; and for such other lines as the company decides would be good feeders for the G. T. P. system, as it may deem expedient, subject to the approval of the Governor in Council.

HOLLY RIVER & ADDISON.—George A. Hechmer, Gen. Mgr., Palmer, W. Va., advises us that contracts for proposed 21-mile extension have not been let nor has a date for receiving bids been received. The company may do its own construction work. Surveys are completed and capital secured. A. P. Hamilton is Ch. Engr., at Webster Springs, W. Va.

MEDICINE VALLEY.—We are officially informed by E. P. Ripley, Pres. of the Atchison, Topeka & Santa Fe Ry., Railway Exchange, Chicago, that construction on this proposed railway has been suspended. The Medicine Valley Ry. Co. was recently incorporated in Kansas, in the interest of the Atchison, Topeka & Santa Fe, to build a railroad from Medicine Lodge to Dodge City, Kan., 95 miles; and from Medicine Lodge north to Great Bend, 75 miles. Capital stock, $3,000,000. Incorporators were: E. P. Ripley, Gardiner Lathrop and Robert Dunlap, of Chicago; J. E. Hurley, W. R. Smith, O. J. Wood and A. A. Hurd, of Topeka, Kan.

NATCHEZ & EASTERN (Mississippi Central).—We are officially informed that contracts will be let about April 15 for building this railroad, which will be 70 miles long. Capital is ready, but running surveys and securing right-of-way has not been begun yet. James Archbald is Ch. Engr., at Brookhaven, Miss. P. L. Peck is Pres., at Scranton, Pa. M. H. McCabe is Supt. and Pur. Agt., at Hattiesburg, Miss. The line probably will run from Brookhaven to Natchez, Miss.

PENNSYLVANIA R. R.—Contracts have been awarded by the Pennsylvania Railroad Co. for straightening its line and completing the four-track system between Harrisburg and Pittsburg. The contract for this portion of the work, which is near Lockport, has been awarded to the EYRE CONSTRUCTION CO., of Philadelphia. A new channel will be cut for 3,000 ft., a short distance from the railroad tracks, and will do away with the necessity of constructing two new bridges, and will in addition provide better trackage facilities.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN.—We are officially informed that surveys were made in 1905 for the extension from Henson to Hickman, Ky. Contracts have not yet been placed nor have bids been asked. Time is indefinite for its construction. E. Mitchell, St. Louis, Mo., is Engr.-of-Construction.

SOUTH & WESTERN.—We are officially informed that contracts will be let, probably within 60 or 90 days' time, for the construction of the extension from Spartanburg northward. The projected length of this railway is 300 miles. It will extend from Elkhorn, Ky., to Spartanburg, S. C. Alfred Walter is Chn., 24 Broad St., New York; Geo. L. Carter, Pres., Bristol, Tenn.; Archer A. Phlegar, Vice-Pres., Christiansburg, Va.; M. J. Caples, Gen. Mgr. and Ch. Engr., at Bristol, Tenn.

SOUTHERN PACIFIC.—Bids will be taken, it is said, for building the extension from Baton Rouge, La., to Lafayette. C. V. Vaughn, of New Orleans, La., is Engr.

THREE LAKES LUMBER CO.—Bids are wanted by the Three Lakes Lumber Co., Three Lakes, Wash., for grading 2½ miles of railroad.

WEST JERSEY & SEA SHORE.—The shareholders will vote at the annual meeting on March 6 to increase the capital stock from $8,000,050 to $10,000,000, to provide for improvements, double-tracking, etc.

YAZOO & MISSISSIPPI VALLEY (Illinois Central).—We are officially informed that the proposed new line between Philipp and Charleston, Miss., is to be about 26½ miles long, according to preliminary survey, with no intermediate towns of importance. Bids on the work will be called for as soon as a final location is completed and approved. Property is being secured along the route for the right-of-way required. W. J. Harahan, Fourth Vice-Pres., Chicago, Ill., is in charge.

ELECTRIC RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

FITCHBURG, MASS.—E. S. Douglass, Ch. Engr. of the Worcester & Holden St. Ry., Holden, Mass., writes us that all right-of-way has been secured for the Worcester & Northern and Fitchburg & Princeton St. Ry. lines. The proposed length is 20 miles, from Fitchburg to Princeton and Holden.

ELMIRA, N. Y.—The Rochester & Elmira Electric Ry. Co. will be incorporated, with $4,000,000 capital, to build a high-speed electric line between Elmira and Rochester. Franchises already have been procured in all the townships through which the road will run, and for a part of its length private right-of-way across country has been contracted for. No construction or grading has been attempted, but surveys have been made of the entire route. It is said that the enterprise is in such shape that work may be started as soon as the formal approval of the State Railroad Commissioners has been obtained. The route runs through Brighton, Avon, Livonia, Lakeville, Dansville, Cohocton, Bath, Painted Post, Corning and Horseheads to Elmira, paralleling the Erie R. R. tracks from Corning westward. The line will be single-track, and, as surveyed, will be 120 miles long. The cars are to be of the high-speed type. The incorporators are Max H. Schultze, Horace G. Abel, Stanley Gifford, Henry Brunssen, Frederick Eckstein, Henry Veithusen, C. B. Geer, Tracy S. Buckingham, of New York. Ralph Wolf, 141 Broadway, is the Atty.

IRWIN, PA.—At the recent annual meeting of the stockholders of the Pittsburg & Westmoreland Ry. Co. an appropriation was made to build a line from Irwin to Herminie, through Rillton and Madison, about six miles. Orders were issued to push the construction of this work. James Bryan is Ch. Engr., Park Bldg., Pittsburg.

VICKSBURG, MISS.—[illegible] reported that Houston Bros. Lumber Co. will build a 2-mile electric railway from its plant to Vicksburg.

NEW ORLEANS, LA.—The Public Belt Railroad Commission, it is reported, will build a single track line ten miles long, on the Mississippi River front from Audubon Park to Montegut St., at a cost of about $10,000 a mile. James W. Porch is Pres. Plans and estimates will be immediately prepared by the engineer.

GALLIPOLIS, O.—We are officially advised that survey for ten miles to coal field has been made by the Indian Guyan Coal Ry. Co. The line will be 40 miles long, from Gallipolis to Rockwood. The remaining 30 miles will be surveyed at a later date. Capital is being arranged for and is partly subscribed. Date for letting contracts has not been set. Charles Comer is Pres., Gallipolis. J. W. Jones, Gallipolis, is Engr. As previously noted, the maximum curvature is 10°. Estimated cost of construction is about $5,700 a mile. The line will penetrate a coal mine section. Company owns coalfields and may operate mines in connection with railway, in which event central power would be built for mines at estimated cost of $13,000. Three bridges are to be built, at cost of $20,000 and six trestles, at cost of $16,500.

SOUTH BEND, IND.—It is reported that the Westinghouse Elec. & Mfg. Co., 111 Broadway, New York City, is preparing plans and estimates on contracts for the construction and equipment of the Indiana Rapid Transit Co.'s line from Terre Haute to South Bend.

INDIANAPOLIS, IND.—John A. Shafer, Ch. Engr. of the Capital Circuit Traction Co., 217½ North Illinois St., Indianapolis, informs us that this company is about ready to make a survey for proposed line. It will be 150 miles long, extending through Greenfield, Shelbyville, Franklin, Martinsville, Danville, Lebanon and Noblesville, Ind. C. N. Crabb is Pres. Noted on Feb. 1.

JOLIET, ILL.—We are officially advised that the FISHER CONSTRUCTION CO., of Joliet, will build the proposed Joliet & Southern Traction Co.'s line from Joliet to Dwight, Morris, Peotone and Blue Island, 90 miles. H. A. Fisher is Pres. and Lee D. Fisher is Ch. Engr., at Joliet. Construction will be begun when weather permits.

ALTON, ILL.—W. R. Heagler, Ch. Engr. of the Alton, Jacksonville & Peoria Ry. Co., Jerseyville, Ill., informs us that this company will construct its line this summer. No contracts are awarded yet. The railway will be 60 miles [illegible] North Alton, Godfrey, Jerseyville, Kane, Carrollton, Berdan, Roodhouse, Mount Olive, Woodson and Jacksonville. It is to be built with the best of equipment for all classes of freight and passenger service. A complete survey will be made, right-of-way is being secured, and no liberal franchises. A. O. [illegible]

CRESTON, IA.—The city council, by unanimous vote, has passed an ordinance granting a franchise to the Des Moines & Creston Electric Ry. Co. This franchise, at the election to be held March 5, will be voted on by the people, it being stated by the company from the [illegible]

DULUTH, MINN.—The Duluth Traction Co. has been incorporated, with a capital stock of Biwabik, and Thomas F. B. Myers, Duluth. $800,000 of the capital stock of the company will be sold with which to build the line from Biwabik to Duluth, the remaining $400,000 of capital stock of the company to be sold with which to complete the line from Biwabik to Virginia, Mountain Iron, Eveleth, Gilbert, Buhl, Chisholm and Hibbing, and the [illegible] of the combined population and location, which is about 50,000. The preliminary survey for the line has been made.

JOPLIN, MO.—E. C. Hall, City Clerk of Joplin, informs us that H. Mitchell and Wm. S. Brawner have applied for a franchise for a street railway on several streets in this city. As was previously noted, the holders of the franchise still have some time in which to begin construction. Gasoline motors probably will be used.

FORT SMITH, ARK.—It is reported that the city council has granted to the Interurban Electric Co. an extension of one year in which to begin work, making the third extension since the company was incorporated two years ago. E. B. Miller, of the Commercial Club, has interested Memphis capital in the enterprise. The work is to be commenced within twelve months and three miles are to be completed eight months thereafter. The company has a charter for 12 miles of road within the city limits and right-of-way through the other cities of the county, the total distance from Fort Smith being about 50 miles.

HOUSTON, TEX.—F. L. Dana, Secy., of Houston-Galveston Traction Co., Houston, writes us that locating surveys and profiles are made and three-quarters of right-of-way secured and the remainder is being obtained. Capital to build is practically secured. Contracts on a portion of the line will be let probably early in March. The line will be about 50 miles long, extending from Houston to Genoa, Harrisburg, Webster, League City, Lamarque, Dickinson, La Porte, Texas City and Galveston. Noted last week. B. I. Willcoxen, Houston, is Location Engr.

EVERETT, WASH.—Charles A. Barron, Gen. Agt. of the Snohomish Valley Ry., Snohomish, Wash., writes us that the line will be 71 miles in length and will extend from Everett to Snohomish, Monroe, Cherry Valley, Novelty, Talt, Falls City, Issaquah and Renton. Surveys are completed and the right-of-way is secured. More than half of the right-of-way is cleared. Bids for construction will be received and contract let soon. Bonds are on the market now. The Chicago Title & Trust Co., Chicago, is acting as trustee. G. M. Cochran is Pres.; E. Colburn, Vice-Pres.; E. L. Colburn, Secy.; E. Colburn, Ch. Engr., all at Snohomish. Capital stock is $750,000, fully paid in. Prospectus and plan are on file at office of Engineering News, New York. Previously noted.

SPOKANE, WASH.—Benjamin J. Weeks, Gen. Mgr. Spokane Traction Co., informs us that this company will not let contracts for proposed 5-mile extension but will have work done by its own forces. Surveys are made and franchises are granted. Jay P. Graves is Pres.

PORTLAND, ORE.—Francis I. McKenna, the promoter of the municipal electric belt line project, writes us that "Initiative Committee" has been appointed to consider plan for surveys and for securing right-of-way. The question of issuing city bonds will be decided by vote at election to be held in June. It is planned to commence operations immediately after the election. The projects contemplated include municipal ownership of docks, two general utility bridges above ship masts, 25 miles of boulevards, 25 miles of railroads, a system of parks, all to cost, approximately, $5,000,000. It is said that vote will be almost unanimously in favor of the project.

FRESNO, CAL.—We are officially advised that the Fresno Traction Co., which was recently granted a franchise, is awaiting construction of underground conduit under the Southern Pacific Ry. Co.'s yards at Fresno St. before placing orders for material. Contracts probably will be let in April. A. C. Balch, Los Angeles, Cal., is Pres. The line will run on three streets, aggregating about 4½ miles in length. A. G. Wishen is Mgr., at Fresno.

LOS ANGELES, CAL.—George E. Pillsbury, Ch. Engr. of the Los Angeles Interurban Ry. Co., Pacific Electric Bldg., informs us that surveys are under way and right-of-way and necessary funds are being secured for proposed 3¼-mile electric railway from Longbeach to Terminal Island. Contracts will be let soon. H. E. Huntington is Pres., Los Angeles. This project is controlled by the Pacific Electric Ry. Co.

OAKLAND, CAL.—The San Francisco, Oakland & San Jose Ry. Co., we are officially informed, has let contracts and construction is now in progress on four miles of extension, in Oakland, of 22d St. branch, reaching the center of city. E. A. Heron is Pres. and Edward M. [illegible]ggs is Ch. Engr., at Oakland.

LIGHT AND POWER PLANTS.

The names of parties awarded contracts are printed in capital letters.

WILTON ... H.—It is reported that this city will v... construct a municipal elec... tric light ...

NEW H... N, CONN.—The Strouse-Adler Co., ... ted, proposes to generate its own elec... and will put in a 3,000 light plant fo... ing purposes, and generate electricity ... used for electric power mo... tors to ... of about 100 HP.

BROO... N, N. Y.—The Sultepec Electric Light & ... Co., of Brooklyn, has been incorpor... with $200,000 capital. A. T. Cole, ... Keogh and R. J. Reisler, of New Y... directors.

NEW ... N, N. Y.—Bids are asked until 11 a. m., ... rch 24, by the Bureau of Yards and Do... Navy Dept., Washington, D. C., for two ... alternators and accessories for the na... rd at New York. Specifications are on ... at office of Engineering News, New Y... Mordecai T. Endicott is Chief of Bureau.

Bids ... asked until 11 a. m., March 31, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for machinery for power plant at New York Navy Yard. Specifications are on file at office of Engineering News, New York.

NEW YORK, N. Y.—Specifications, instructions to bidders and six blank proposals for electric light and power system at Fort Wood, N. Y., are on file at office of Engineering News, New York. Plans will be on file soon. Bids are asked until April 16. Noted last week.

ATLANTIC CITY, N. J.—Contracts for the erection of six power stations to be used in connection with the third rail trolley line between Camden and this city have been awarded to LYNCH BROS., Lippincott Bldg., Philadelphia. The estimated cost is $60,000.

AVALON, N. J.—Plans are prepared for an electric light plant, and it is probable that bids will be asked in a short time.

PERTH AMBOY, N. J.—The Citizens' Electric Light, Heat & Power Co. has awarded the contract for its new building to the MERCER CONSTRUCTION CO.

LEBANON, PA.—The BROWN ENGINEERING CO., of Reading, has been awarded a contract to furnish an electric lighting plant for the American Iron & Steel Co.'s new machine shop, and other parts of the works in this city.

HAVRE DE GRACE, MD.—The Havre de Grace Electric Co. contemplates installing another unit shortly, according to reports, consisting of a 15-KW. generator, direct-connected to a 225 HP. engine. Wesley W. Reynolds, Pur. Agent.

FRANKLIN, VA.—See under Water-Works.

NORFOLK, VA.—It is the purpose of the Norfolk Railway & Light Co., according to General Manager Hathaway's statement, to construct a new power-house, install new machinery and make improvements aggregating $1,000,000.

LEXINGTON, VA.—It is said that the Lexington Light & Power Co. will improve and double their plant. The metric system will be introduced.

SHEPHERDSTOWN, W. VA.—The Martinsburg Power Co. has applied to the County Court of Jefferson county for a franchise permitting it to erect a line of poles and wires from dam No. 4, about four miles north of this place, to Shepherdstown and Kearneysville, for the purpose of conveying electric currents. This company expects to establish a big electric plant at dam No. 4, using the power created by the dam across the Potomac River. This will furnish light and power to Shepherdstown and Martinsburg, and will also run a branch line to Kearneysville, providing power for the extensive stone quarries at that place.

GREENSBORO, N. C.—The Central Electric Co., of Greensboro, has been chartered with an authorized capital of $25,000 to engage in the electrical business. The incorporators are W. C. Waddell, C. W. Petty and C. E. Leak, of Greensboro.

BAMBERG, S. C.—Bids are asked until 2 p. m., March 15, by board of public works for machinery and material and installing complete an electric light plant. The plant will embrace two 100-HP. high-pressure boilers with cross flue and stack, one 150-HP. Corliss engine, one 100-KW. A. C. two or three phase revolving field or inductor generator, 31 arcs, 25 50 c. p. series lamps with regulator, 1,000 light transformers and meter capacity, pole line and brick building. A. W. Knight, Clk.

COLUMBUS, GA.—According to the "Pink Sheet Daily Bulletin" the Columbus Electric Co., a new company, has acquired the property of the North Highland power plant and riparian rights of Columbus Power Co.; property of the Chattahooche Falls Co., of North Columbus; and property of the Coweta Power Co., extending several miles along the Chattahoochee river in Muscogee and Harris counties. The company will have a capital paid in of $1,850,000, and an authorized capital of $3,000,000. Large developments will follow, including a 3,000-HP. steam plant, paper mill, etc. George J. Baldwin, of Savannah, is president of three of the local properties, and can give information.

JACKSON, GA.—Bonds amounting to $19,-000 have been authorized, the proceeds to be used with $20,000 already available for construction of a light and water plant.

ADEL, GA.—Adel Electric Light & Power Co. has been organized with $5,000 capital stock and privilege of increasing to $20,000. William Scandrett is Pres.; J. F. Wilkes, Vice-Pres.; and J. J. Parrish, Jr., Secy. and Treas. It is stated that bids will be asked shortly for the construction of plant.

PHOENIX, ALA.—It is reported that city contemplates installing plant for the generation of electric light and power. A committee has been appointed to investigate and obtain estimates on a plant for a population of 5,000. Warren Williams is Mayor.

GOODWATER, ALA.—Bids for construction of hydro-electric power plant near Goodwater or any part of same will be received and specifications for same will be furnished on application by L. W. Allen, Town Clk.

WINFIELD, LA.—The city has granted franchise to the Winfield Electric Light & Power Co., Ltd., to erect and operate electric light and power plant.

ENNIS, TENN.—A franchise has been granted to W. A. Ross, of Los Angeles, Cal., for the construction of a gas plant, to cost $25,000.

CINCINNATI, O.—The city clerk has been directed to advertise for bids for supplying plans and specifications for an electric plant for supplying lights for the streets and public buildings of the city.

SOUTH BEND, IND.—The South Bend & Mishawaka Gas Co. will erect a new gas plant here.

CHICAGO, ILL.—The engineering committee of the Sanitary District of Chicago, 188 Madison St., has let the contract for three additional beartrap dams to be constructed at Lockport, Ill., to HAYES BROS., Janesville, Wis., at $318,337. Work is to be begun at once.

OCONTO, WIS.—It is stated that a 3-year contract for electric lighting has been awarded to the PEOPLES LAND & MFG. CO., of this city, at $55 per lamp per year. Joseph Pocquette is Chn. Lighting Com.

BROOKSTON, MINN.—The Duluth & Iron Range Railroad Co. has let contract for building new power plant for its shops and installing necessary machinery to the ERIE HEATING & ELECTRIC CO., Railway Exchange Bldg., Chicago, Ill. Estimated cost, $60,000. Work is to be completed by April 15.

FOND DU LAC, MINN.—The contract for construction of generator station at this city for the Great Northern Power Co., of Duluth, Minn., has been awarded to J. W. HILLIARD, 220 West Superior St., Duluth, Minn. Estimated cost, $100,000.

WICHITA, KANS.—It is said that the Missouri Pacific Ry. Co. will build an electric plant to furnish light for its various buildings and yards here.

LAWRENCE, KAN.—The Lawrence Gas Co. has decided to spend $40,000 this year in making improvements.

GIBBON, NEB.—Village board has granted J. H. Davis & Son franchise to build electric light and power plant.

TECUMSEH, NEB.—It is reported that the city will invest $12,000 in a new electric light plant. The Mayor will furnish information.

ST. LOUIS, MO.—Clinton, Mo., has voted in favor of building a new $100,000 municipal lighting plant.

COFFEEN, MO.—The city council has awarded a franchise to Frank Edwards, of that city, for an electric lighting plant.

ST. LOUIS, MO.—Thomas B. Carter, supervisor of city lighting, has been instructed by the board of public improvements to collect and tabulate data concerning the cost and feasibility of a municipal electric light plant sufficient to light the entire city.

HARRISBURG, ARK.—The Harrisburg Electric Light & Power Co. has filed articles of incorporation, showing a capitalization of $25,000. The corporators are A. A. Boon, Thos. Flournoy and others.

OZONA, TEX.—The Ozona Improvement Co., capital $25,000, has been chartered. John Young is Pres.; Elam Dudley, Secy. and Treas. The company has made a contract with MAYER & CO. to put in a two-ton ice plant and an electric light plant to be in operation by May 15.

MARLOW, IND. T.—See under Water Supply.

CHEROKEE, OKLA.—Cherokee Electric & Mfg. Co. will operate electric light plant of 640 lights and 10-ton ice plant. A brick building 46 × 56 ft. will be erected. About $10,000 will be invested. L. G. Carpenter is Gen. Supt.

GUNNISON, COLO.—Albert B. Sanford and associates, of Denver, are interested in a project to erect a power plant of about 30,000 HP. on the Taylor River at Taylor Park. It is proposed to erect a 150-ft. dam. Loren B. Curtis and Charles B. Patrick are Engrs.-in-Charge of surveys.

SEATTLE, WASH.—Erection and construction of a light and water station to generate 10,000 HP. to supply industries in Seattle and Tacoma is to be begun shortly at a point on Green River adjacent to the mining town of Franklin. Eastern capitalists, principally from Pennsylvania, and represented in this city by Andrew Kennedy, are financing the deal, which will involve an expenditure of close to $1,000,000.

SEDRO-WOOLEY, WASH.—The Skagit Improvement Co. will shortly install a steam plant to furnish power for lighting the city. A 250 HP. engine will be installed.

ASHLAND, ORE.—City has purchased from the Ashland Electric Power & Light Co. all its water and property rights in Ashland Creek, and contracts for five years' lighting for $11,000. A new system will be installed, at cost of $4,000.

EUGENE, ORE.—The Chambers Power Co. has been incorporated here. The incorporators are F. L. Chambers, George Midgley and Darwin Bristow. The capital stock is $50,000.

NAPA, CAL.—Articles of incorporation of the Cache Creek Electric Company have been filed in the county clerk's office. The capital is $1,000,000. The company intends to generate and distribute electricity for lighting and power purposes in Lake county and other counties, and will erect buildings and install machinery for that purpose.

MARYSVILLE, CAL.—The Marysville Gas & Electric Co., of Marysville, Cal., will build a new gas plant here.

CHICO, CAL.—E. W. Suteliffe, Ch. Engr., in charge of construction of Northern Power Co.'s plant at this place, writes us: "All surveys have been made and rights of way secured for line to transmit 5,000 KW. Ample capital. All material shipped. Poles set 30 miles to date. Very heavy, up-to-date construction. Will probably duplicate line in near future. Will probably be $6,000,000 spent on electric railways and power plants in this vicinity during the next two years."

RED BLUFF, CAL.—Articles of incorporation of the Battle Creek Power Co., a San Francisco corporation, have been filed by Henry W. Brown and Walter E. Carr, of Colma, Harold L. Wright, and others, of San Francisco. The company is capitalized at $1,000,000, and its purpose is to furnish electric power and water.

FULLERTON, CAL.—Bids are asked until 8 p. m., April 9, by board of trustees for electric light and power system. G. A. Ruddock, City Clk.

CAMPBELLFORD, ONT.—It is reported that the city authorities are contemplating installing a new water-power plant with a capacity of 2,000 KW., which will necessitate the construction of a dam and new hydraulic and electric machinery. F. J. Smith is Mgr.

BOISE, IDAHO.—HENRY R. WORTHINGTON, of 114 Liberty St., New York, was awarded the contract for installing the new electric pumping plant to be put in by the Boise Artesian Hot & Cold Water Co., at $5,500.

PAYETTE, IDAHO.—The Idaho Light & Power Co. has been incorporated, and will build power plant as soon as weather permits.

DALHOUSIE, N. B.—It is planned to install an electric lighting plant here.

BRIDGES.

The names of parties awarded contracts are printed in capital letters.

SALEM, MASS.—Bids are asked until 10 a. m., March 14, for the construction of the substructure and superstructure of a rolling lift bridge over the New Canal, in Gloucester, Mass. James P. Hale, Clk. County Comrs. (Advertised, Engineering News.)

PROVIDENCE, R. I.—Specifications are on file at office of Engineering News, 220 Broadway, for bridges over Moshassuck River, at Smithfield Ave., and replacing fixed spans of Point St. bridge over Providence River, Providence, R. I. (Advertised, Engineering News.)

NEW HAVEN, CONN.—Contracts were awarded to MILLIKEN BROS., 11 Broadway, New York, for two steel bridges on the Hartford Division of the New York, New Haven & Hartford Railroad Co. Contracts for four steel bridges on the same line were awarded to the BERLIN CONSTRUCTION CO., of New Britain, Conn.

MT. VERNON, N. Y.—It is reported that the New York, New Haven & Hartford Railroad Co. will construct a 4-track lift bridge here.

PEDRICKTOWN, N. J.—Plans and specifications are on file at office of Engineering News, 220 Broadway, New York, for bridge across Old Man's Creek, at Pedricktown, N. J. (Advertised, Engineering News.)

PATERSON, N. J.—It is stated that the Board of Freeholders is considering replacing the temporary bridges at Wagaraw and Straight Sts., by permanent structures.

ALTOONA, PA.—Preliminary surveys have been made by this city and the Altoona & Logan Valley Electric Railway Co. for the proposed bridge at Seventh St. Harvey Linton is City Engr.

CLAYSVILLE, PA.—The contract for erecting bridge across National Road at Coon Island was awarded to JOSEPH FORREST & SON, of Washington, Pa.

CHARLOTTE, N. C.—The contract for erecting the steel superstructure of the 2-span bridge across Sugar Creek here was awarded to the VIRGINIA BRIDGE CO., of Roanoke, Va.

MARION, N. C.—The South & Western Railway Co. will erect a bridge across the Catawba River near here. M. J. Caples, Bristol, Tenn., is Mgr.

COVINGTON, GA.—The contract for erecting a steel bridge across Alcova River, south of here, has been awarded to the GEORGE E. KING BRIDGE CO., of Des Moines, Iowa.

VICKSBURG, MISS.—The contract for erecting the steel bridge over Moore's Bayou was let to the W. T. YOUNG BRIDGE CO., of Nashville, Tenn.

INDIANOLA, MISS.—The Board of Supervisors of Sunflower county is arranging for the construction of a steel drawbridge across Sunflower River here.

CHATTANOOGA, TENN.—The following bids were received for constructing Eleventh St. bridge: Milwaukee Bridge Co., Milwaukee, Wis., (3) $13,500, (4) $10,300, (5a) $1,350, (5b) $900; Virginia Bridge Co., Roanoke, Va., (1) $15,736, (2) $11,514, (3) $10,421, (4) $8,151, (6) $767; Converse Bridge Co., (1) $14,232, (2) $10,598, (3) $6,550, (4) $9,650, (5a) $980, (5b) $1,400; Bellefontaine Bridge & Iron Co., Bellefontaine, O., (1) $16,394, (2) $11,969; Wynkopp & McGormley, (3) $16,472, (4) $12,993, (5a) $2,272, (5b) $1,709; American Bridge Co., 11 Broadway, New York, (1) $14,690, (2) $10,940, (3) $11,-175, (4) $8,165, (5a) $1,390, (5b) $890; Champion Bridge Co., (2) $7,761; Belmont Iron Works, (3) $9,492, (4) $6,444, (5a) $1,588, (5b) $986, (6) $751. Robt. Hooke is City Engr.

DELAWARE, O.—The contract for the substructure of the Delaware River bridge was awarded to CLARENCE HAZELTON, of Delaware, for $1,712.

CINCINNATI, O.—It is reported that the Cincinnati Southern Railway Co. will rebuild its bridge across the Ohio River, at a cost of $1,000,000.

NEWPORT, IND.—Bids are asked by the Board of County Commissioners until noon, March 12, for constructing bridge across Wabash River.

BLOOMFIELD, IND.—Bids are asked by the Board of County Commissioners of Greene county, until 2 p. m., March 6, for several bridges in various townships.

COLUMBIA CITY, IND.—Bids are asked by John M. Mowery, Chn. Bd. Comrs., until noon, March 13, for constructing steel bridges and stone and concrete culverts.

CRAWFORDSVILLE, IND.—A petition has been filed at the office of the County Auditor asking for a new bridge across Sugar Creek at Conrad's ford, near Garfield.

MERRILL, MICH.—The contract for the new span in the bridge here was awarded to the JOLIET BRIDGE & IRON CO., Joliet, Ill., for $2,998.

BAY CITY, MICH.—Bids are asked by D. F. Kinney, Chn., until noon, March 12, for constructing an abutment pier at the West end of fixed span of Lafayette Ave. bridge, over East Channel.

JOLIET, ILL.—Bids were opened and contract awarded for construction of concrete bridge across Du Page River, between Channahon and Minooka: Steel bridge, 140 ft. span, superstructure only, Continental Bridge Co., $4,062; Joliet Bridge & Iron Co., $4,124; Joliet Steel Construction Co., $3,819. For concrete substructure, Joliet Bridge & Iron Co., $2,250; Joliet Steel Construction Co., $1,980; Keltie Stone Co., $2,677. For all concrete bridge, two spans, each 80 ft., Joliet Bridge & Iron Co., $6,480; Marsh Bridge Co., $8,000; Concrete Construction Co., $5,600; Keltie Stone Co., $8,550; JOLIET STEEL CONSTRUCTION CO., $5,495.

RACINE, WIS.—Bids are asked by Board of Public Works, until March 6, for construction of swing bridge across Root River, at Main St. Bridge will have one span 240 ft. long, width 40 ft. P. H. Connolly is City Engr.

SIOUX CITY, IOWA.—It is reported that the Chicago, Burlington & Quincy Railroad Co. will erect a bridge across the Missouri River here. W. L. Breckenridge, Chicago, is Ch. Engr.

HOKAH, MINN.—The contract for constructing bridge across Root River was awarded to the JOLIET BRIDGE CO., of Joliet, Ill.

SYRACUSE, NEB.—Bids are asked by Board of County Commissioners until March 7 for constructing 100-ft. steel bridge near here. Charles H. Busch is County Clk.

NEBRASKA CITY, NEB.—Bids are asked by L. E. Jones, Chn. Com., until March 7, for the construction of a 100 ft. span steel bridge.

PIERCE, NEB.—Bids are asked by W. G. Hirons, County Clk., until March 12, for constructing three bridges.

COLUMBUS, NEB.—Bids are asked by John Graf, County Clk., until noon, March 8, for all bridges to be built in Platte county for one year.

MADISON, ARK.—The Madison Bridge Co. has been organized with a capital stock of $40,000 to construct a bridge across St. Francis River at Madison. John Gatling is Pres. T. C. Morwin is Secy.

PARIS, ARK.—The contracts for erecting two bridges here were awarded to the JOLIET BRIDGE CO., Joliet, Ill.

CANON CITY, COLO.—It is reported that a railroad bridge will be erected across Royal gorge, near Canon City, Co'o.

COLFAX, WASH.—Bids are asked by Board of County Commissioners, until 2 p. m., April 3, for repairs to Riverside bridge.

SAN FRANCISCO, CAL.—The matter of erecting the proposed reinforced concrete viaduct across Mission St. has been receiving renewed attention. The proposed structure will be 1,000 ft. long. Thomas P. Woodward is City Engr.

BUILDINGS.

The names of parties awarded contracts are printed in capital letters.

WOBURN, MASS.—Contract for construction of a school-house here has been awarded to GEORGE W. HARVEY CO., 24 Milk St., Boston, Mass., at $88,824.

HOLYOKE, MASS.—We are officially advised that the following contracts have been awarded for the construction of an armory for Co. D, bids for which were opened Feb. 16: General contract, to GEORGE L. THORPE, Holyoke, Mass.; plumbing, to SULLIVAN & CARMODY, Holyoke; heating, to PETER J. DONNELLY, Holyoke. Contract for iron was not awarded, but will be let shortly. Armory Commission withholds contract prices.

BUFFALO, N. Y.—Contract for the construction of the 12-story hotel for E. M. Statler, noted on Feb. 8, has been awarded to MOSIER & SUMMERS, at $500,000.

Bids were received Feb. 14 by A. G. Hinkley, Clk., for the construction of a concrete floor in the 65th Regiment Armory, and contract was awarded to F. W. KNICKENBERG, 702 Michigan St., Buffalo, at $22,400.

COOPERSTOWN, N. Y.—Bids are asked until 2 p. m., March 15, for the construction of a high school building. Wilson Potter, 3 Union Sq., New York, is Arch. W. Festus Morgan, Secy. Bd. Education.

NEW YORK, N. Y.—Bids are asked by Lieut.-Col. W. L. Marshall, Engrs., Army Bldg., New York, until noon, March 20, for structural material required for a storehouse at Fort Totten, Willets Point, N. Y. **(Advertised, Engineering News.)**

NEW YORK, N. Y.—Bids were opened Feb. 26 by C. B. J. Snyder, Supt. School Bldgs., for installing heating and ventilating apparatus for additions to and alterations in Public School 109, Boro. of Brooklyn. Rossman & Bracken Co., 11 East 22d St., New York, was lowest bidder, at $53,800.

NEW YORK, N. Y.—Plans have been filed by Ernest Flagg, Arch., 35 Wall St., for the proposed uniting and remodeling of the 14-story Singer and 11-story Bourne office buildings at the northwest corner of Broadway and Liberty St., and also for a central tower of 40 stories, 593 ft. high. The proposed tower will be of steel skeleton construction and will be 65 ft. square for 36 stories and have a dome of four additional stories, crowned with a cupola bearing a flagstaff. The facades of the tower will be of ornamental brick and limestone, and the tower will be lighted by a central bay extending from the 11th to the 36th story, with four rows of windows on each floor and an additional double window on either side of this bay, at each story. The tower will have a floor space of over 150,000 sq. ft., and will be fitted with a group of four elevators. It will also have two spacious interior courts. There will be a number of additional elevators in the building proper. The plans provide also for the addition to the Singer Building of a Broadway annex 74.10¼ ft. front, giving a total Broadway frontage of 132.10¼ ft. and a similar annex to the Bourne Building on Liberty St. of 52.10¼ ft. front, giving a total frontage in the street of 200.07¼ ft. The building proper will have a height of 202 ft. The improvements which are to be made for the Singer Mfg. Co., as owner, are to cost $1,500,000, according to the architect's estimate.

NEW YORK, N. Y.—Plans have been filed by George M. Hess, Arch., 1285 Broadway, for an 8-story, fireproof warehouse for the Lenox Warehouse Co., in 143d St., east of Lenox Ave. Estimated cost, $72,000.

Bids are asked by C. J. B. Snyder, Supt. School Bldgs., until 11 a. m., March 5, for the general construction, etc., of additions to and alterations in Public School No. 4, Boro. of Richmond; and for like work in Public School No. 51, Boro. of Manhattan.

C. Abbott French, Arch., 627 Columbus Ave., has completed plans for a 7-story brick and stone loft building, to be erected at 11-15 Walker St., for A. L. Olsen, 1518 Nyse Ave.

Thain & Thain, Archs., 4 E. 42d St., have completed plans for a brick, stone and terra cotta apartment house, to be erected at 141st St. and Broadway, for L. Weinstein, 501 West 138th St., 150 × 180 ft. Estimated cost, $250,000.

The Richmond Realty Co., 56 Liberty St., desires bids on sub-contracts for a 12-story loft building, 40 × 110 ft., brick and stone, to be erected at Broadway and 12th St. Samuel Sass, 23 Park Row Bldg., is Arch.

BINGHAMTON, N. Y.—We are officially advised that bids will be asked until about March 20 for the general construction of the Y. M. C. A. building here. Six stories, 84 × 132, fireproof construction, costing about $135,000. W. H. Whitlock, Binghamton, and Linn Kinne, Herkimer, N. Y., are Archs.

NEW YORK, N. Y.—The general contract for the erection of a new store and office building at 373 Fifth Ave., eight stories, 25 × 100 ft., for Joseph Fahys & Co., 54 Maiden Lane, has been awarded to A. R. WHITNEY, JR., & CO., 135 Broadway, New York. Hunt & Hunt, 28 East 21st St., are Archs.

NEW YORK, N. Y.—Plans have been completed for a new bank building, to be erected at 5-7 Park Pl. by the Broadway Savings Institution. It will be one story, 40 × 70 ft., brick and stone. York & Sawyer, 156 Fifth Ave., are Archs.

The FLEISCHMANN REALTY & CONSTRUCTION CO., 170 Broadway, has been awarded the general contract for a 2-story, brick and stone synagogue to be erected at 120th St. and Lenox Ave., for Temple Israel. A. W. Brunner, 33 Union Sq., is Arch. Building will be 90 × 100 ft., and cost $150,000.

The New York & Jersey Ry. Co. has plans in progress for a terminal and office building to be erected at Sixth Ave. and 33d St., 15 stories, 250 × 300 ft., brick, stone and steel. William McAdoo, 113 Broadway, is Pres.

NEW YORK, N. Y.—Welch, Smith & Provot, Archs., 11 East 42d St., have plans in progress for a residence to be erected at 1046 Fifth Ave. for W. W. Hall, 159 East 38th St. Building will be five stories, brick, stone and terra cotta, 25 × 100 ft., costing $100,000.

NEW YORK, N. Y.—Neville & Bagge, Archs., 217 West 125th St., have completed plans for an apartment house to be erected at 143d St. and Hamilton Pl. for the J. V. Signell Co., 302 Central Park West. Brick and stone, six stories, 75 × 100 ft.

Radcliffe & Kelley, Archs., 3 West 29th St., have plans in progress for a stable, to cost about $300,000, which will be erected at 254 West 40th St. for the New York Cab Co. Building will be reinforced concrete, 8 stories high, 100 × 125 ft.

Plans are in progress at office of De Lemos & Cordes, 130 Fulton St., for a bank building to be erected at 14th St. and Eighth Ave. for the New York County National Bank. It will be brick and stone, fireproof, eight stories, 50 × 100 ft. General contract has been awarded to PHILIP HERMAN'S SON, 407 West 14th St.

L. A. Goldstone, Arch., 110 East 34th St., has plans in progress for a 6-story apartment house, 75 × 100 ft., to be erected at Seventh Ave. and 129th St., for Greenbaum & Wiener, 312 East 93d St.

WEST POINT, N. Y.—The J. W. BISHOP CO., 107 Foster St., Worcester, Mass., has received the contract for the erection of a new headquarters building at the U. S. Military Academy. The building will be of stone, and cost about $428,000. Cram, Goodhue & Ferguson, 15 Beacon St., Boston, are Archs.

NEWARK, N. J.—F. F. Ward, Arch., 203 Broadway, New York, will take figures soon on a school house to be erected at Hamburg Place, this city. Building will be brick, three stories, 75 × 120 ft., and will contain twelve class-rooms, assembly hall and gymnasium. $81,000 have been appropriated.

SUMMIT, N. J.—E. M. WALDRON, Newark, N. J., has been awarded the general contract for erecting a church for the First Presbyterian congregation. Brick and stone, one story, 70 × 150 ft. Donn Barber, 24 East 23d St., New York, is Arch.

NEWARK, N. J.—Hurd & Sutton, Archs., Newark, will take figures soon for the erection of a school house on Parker St. Building will be brick, three stories, 75 × 160 ft.

TRENTON, N. J.—Plans have been drawn by Harry A. Hill, Arch., Trenton, for a 3-story, brick, stone and terra cotta school building on Tyler St. It will be 158 × 124 ft., and cost about $100,000.

WOODSTOWN, N. J.—The board of freeholders of Salem county will have plans drawn shortly for an insane asylum at this place. Brick, stone and steel, fireproof, costing $75,000.

PHILADELPHIA, PA.—The contract for the construction of the 1-story stone branch library building at 17th and Spring Garden Sts. has been awarded to F. A. HAVENS & CO., Perry Bldg., at about $61,000. Field & Medary, 1414 South Penn Sq., are Archs.

SCRANTON, PA.—E. A. Westover, Arch., Keith Bldg., Philadelphia, Pa., is preparing plans for a theater at this place. Building will be of brick, stone and steel, fireproof, 2-story, 80 × 150 ft., costing $100,000.

PHILADELPHIA, PA.—DOYLE & DOAK, 1509 Samson St., have been awarded the contract for constructing a 4-story, fireproof club-house at 16th and Walnut Sts., for the Racquet Club. Brick, stone and steel will be used, and cost is $325,000.

BALTIMORE, MD.—See under Streets and Roads.

BALTIMORE, MD.—G. A. BLAKE, Law Bldg., this city, has been awarded the contract for a fireproof office building for the Pennsylvania R. R. Co. at Calvert and Baltimore Sts., at about $65,000.

Bids were opened Feb. 14 by James Knox Taylor, Supervising Arch., Treasury Dept., for the installation of hydraulic lifts in the U. S. Custom House at Baltimore. The Grote Mfg. Co., Evansville, Ind., was lowest bidder at $2,500.

WASHINGTON, D. C.—The Carnegie Institution has purchased a site and will erect a 2-story laboratory building, costing about $100,000. Dr. S. R. Woodward is Pres.

William H. Moses, Harry C. Moses and Arthur C. Moses, all of W. B. Moses & Sons, Eleventh and F Sts., N. W., will erect an apartment house on Virginia Ave., near Thomas Circle, N. W. The building will be 165 × 210 ft., fireproof construction, brick with white stone trimmings. Cost of structure will be about $600,000. It is reported that Francis H. Duehay, 815 Connecticut Ave., N. W., will construct the building.

The Anderson Dray & Storage Co. is about to erect a 7-story concrete fireproof storage building at Delaware Ave. and D St., S. W.

WASHINGTON, D. C.—The Burlington Apartment House Co. is about to erect a large apartment house on Vermont Ave., south of Thomas Circle, N. W., at an estimated cost of $300,000. Francis H. Duehay, 815 Connecticut Ave., N. W., is Pres.

Contract for the construction of a 1-story gymnasium building, 50 × 100 ft., for Georgetown College has been awarded to JOHN S. LARCOMBE, 808 17th St., N. W., Washington, at a cost of about $50,000. Ewing & Chappell are Archs.

BRISTOL, VA.—Thomas C. Martin is in charge of construction of the new building to be erected for the Y. M. C. A. here. Estimated cost is $50,000.

CHAPEL HILL, N. C.—Frank P. Milburn, Arch., Columbia, S. C., will prepare plans for the new library for the University of North Carolina. Estimated cost, $80,000. Francis P. Venable is Pres.

ATLANTA, GA.—It is reported that the Southern Railway is about to let contract for the construction of proposed freight depot to cost about $300,000; building for incoming freight to be 2 or 3 stories, 50 × 60 ft., and for outgoing freight to be 1 or 2 stories, 37 × 700 ft. H. B. Spencer, Washington, D. C., is Gen. Mgr.

VICKSBURG, MISS.—Board of supervisors of Warren county has adopted plans submitted by W. A. Stanton for a new jail. Cost, approximately $50,000.

NEW ORLEANS, LA.—H. C. Koch & Co., Archs., 120 Wisconsin St., Milwaukee, Wis., are preparing plans for the new Grunewald Hotel to be erected here, at a cost of about $1,000,000. It will cover a ground space of 189 × 140 ft., and will be 200 ft. high, having 14 stories above ground. Bids for the concrete foundation and structural steel work are being received, according to reports.

The CONGRESS CONSTRUCTION CO., 140 Dearborn St., Chicago, Ill., has been awarded the general contract for the construction of the Louisiana Eye and Ear Infirmary. The contract price is $145,000. Favrot & Livaudais, New Orleans, are Archs.

MEMPHIS, TENN.—Bids are asked by Carney & Corey, Archs., Memphis, until March 20, for theater to be erected by the J. L. Faxon Stock Co., to be 2 stories, 70 × 112 ft., of brick, stone, marble, concrete and terra cotta, concrete floor, metal and gravel roofing, metal partitions and cornices, gas and electric fixtures, modern plumbing and trunk chute. Cost, $50,000.

We are officially advised that the contract for erection of an apartment house for Russell Martin, noted on Feb. 8, has been awarded to E. M. APPERSON, Memphis.

LOUISVILLE, KY.—The principal contract for the construction of the Seelbach Hotel annex has been awarded to the NOEL CONSTRUCTION CO., Baltimore, Md. Building will be fireproof, steel construction, 10 stories, costing $400,000.

IRONTON, O.—Richards, McCarty & Bulford, Archs., Ruggery Bldg., Columbus, O., are preparing plans for a 3-story courthouse, 90 × 130 ft., for the Lawrence county commissioners, according to reports. E. B. Willard, Chn. Bldg. Comn.; A. C. Robison, Secy., Ironton. Press brick, terra cotta trimmings, fireproof construction, costing $135,000.

CLEVELAND, O.—The contract for the new St. Michael's school house here has been let to ANDREWS BROS., for $89,000. E. H. Uhlrich is Arch.

ATHENS, O.—Edward C. Van Leyer and Edward A. Schilling, Archs., Detroit, Mich., will draw the plans for the proposed new high school to be erected here. Estimated cost, $100,000.

CHICAGO, ILL.—Barnett, Haynes & Barnett, Archs., 168 Michigan Ave., are preparing plans for a hotel, to be erected in the business district. To be 15 stories, 100 × 180 ft., built of brick, stone and terra cotta, steel, fireproof construction, and will contain about 700 rooms. $1,200,000 is estimated cost.

CHICAGO, ILL. — Frederick Lindquist, Arch., 90 Washington, St., is preparing preliminary sketches for an apartment building to be built at 283 East Erie St., for William Bonnar. It will be 8-story, 64 × 88 ft., and cost about $100,000.

Barnett, Haynes & Barnett, Archs., 168 Michigan Ave., are reported to be about to take bids for a hotel, to be erected at 13th St. and Michigan Ave. for the Southern Hotel Co. Building will be 10 stories, 100 × 171 ft., built of brick, terra cotta and steel. $300,000 is estimated cost. Chas. R. Marvin, Jr., is Chicago representative.

CHICAGO, ILL.—The contract for the construction of the Cook county court-house has been awarded to WILLIAM GRACE & CO., 1 Madison Ave., New York, at $3,284,000.

Barnett, Haynes & Barnett, Archs., are reported to be preparing plans for two warehouses, to be erected out of the city. Each to be 100 × 1,200 ft., built of brick and terra cotta, steel fireproof construction, and cost a total of $3,000,000.

CHAMPAIGN, ILL.—Bids are asked until 2 p. m., March 6, for the erection of a church building for the First M. E. Church. A. P. Gulick, Chn. Bullard & Bullard, Springfield, Ill., are Archs.

MADISON, WIS.—It is reported that bids are asked by the state board of normal regents until March 27 for the new state normal school to be erected in Milwaukee according to plans by Van Ryn & De Gelleke, Archs., 211 Grand Ave., Milwaukee. A general contract will be let except for heating and plumbing, which must be bid upon separately. Estimated cost is $140,000.

WAUSAU, WIS.—Tentative plans are in progress for a new Y. M. C. A. building here, costing $50,000. Neil Campbell is Supt.

MINNEAPOLIS, MINN.—We are officially advised that contracts will be let about March 20 for the construction of the administration building for the City Hospital. Building will be fireproof construction, 3-story, 80 × 90 ft., costing $80,000. Lowell A. Lamoreaux, 1108 Lumber Exchange, Minneapolis, is Arch. Noted on Feb. 15.

ST. PAUL, MINN.—C. H. Johnston, Arch., 712 Manhattan Bldg., is now receiving bids for the construction of the pressed brick and cut stone main building at the State University in Minneapolis, costing $400,000. He is also receiving bids for the erection of the new main hall at the state experimental farm here, costing $250,000.

ST. PAUL, MINN.—We are advised that the Orpheum Circuit Co., Fred. Beck, Chicago, Ill., Mgr., will erect 5-story, fireproof, pressed brick and cut stone hotel on Market St. Estimated cost, $100,000.

LAWRENCE, KAN.—Bids are asked until 11 a. m., March 15, for the construction of an auditorium and gymnasium building at the University of Kansas. Also for installation of heating and plumbing system at the university medical pavilion. Willis K. Folks, Secy., Regents Univ., Kansas. John F. Stanton, State Arch., Topeka.

ST. LOUIS, MO.—Plans are being prepared by Barnett, Haynes & Barnett, Frisco Bldg., for a cathedral, to be erected here for Archbishop Glennon, St. Louis. To be 1-story, 400 × 212 ft., built of gray granite, with a Romanesque exterior and Byzantine interior, plate and art glass, hardwood finish, plastic ornaments, marble columns, iron and steel work, combination light fixtures, etc. $2,000,000 is the estimated cost.

The SOUTHERN ILLINOIS CONSTRUCTION CO., St. Louis Ave. and Belt Railroad, East St. Louis, Ill., has been awarded the contract for erecting the $1,750,000 16-story business building on Fourth St., from Chestnut to Pine. The company to erect the structure will be incorporated soon with a capital of $3,000,000. Lawrence B. Pierce has charge of the work. F. C. Bansack is Arch., Eighth and Locust Sts. Building will be of steel frame construction, have complete lighting and ventilating systems, eight passenger and one freight elevators; part of the basement will be used for the lighting, heating and power plant. Red brick, with terra cotta trimmings, marble.

The lowest bid for the construction of the proposed William Clark school at Union and Kensington Ave. was submitted by the E. C. Gerhard Building Co., 620 Chestnut St., at $157,777. The HOUSER PLUMBING CO. secured the plumbing contract at $8,000; E. H. ABADIE, the heating and ventilating contract at $17,325; and A. RIEMAN & CO., the electrical contract at $5,200.

COLUMBIA, MO.—We are officially advised that the new Boone county court-house will be 100 × 120 ft., stone, steel and concrete, three stories, costing $100,000, without equipment. Plans will be ready for bids about April 15. J. H. Felt & Co., Kansas City, are Archs.

JOPLIN, MO.—A hotel, six stories, 110 × 125 ft., will be erected by Thomas Connor here at a cost of about $500,000.

HOUSTON, TEX.—It is announced by Samuel Lazarus, Pres., Houston Belt & Terminal Co., that the plans of that company contemplate not only the building of a terminal system of railway [illegible] building of a passenger [illegible] mated cost of the depot [illegible]

SIOUX FALLS, S. DAK. [illegible] tract for erecting the [illegible] was let to J. J. OLSEN [illegible] for $86,475, according to [illegible] Schwarz is Arch.

BREMERTON, WASH. [illegible] Yards and Docks, Navy [illegible] D. C., has awarded the [illegible] struction of boiler and [illegible] building at the navy yard, [illegible] ington, to CONGRESS CO. [illegible] 140 Dearborn St., Chicago [illegible] were opened Jan. 20.

SACRAMENTO, CAL. — [illegible] asked by the high school [illegible] 15 for the erection of a [illegible] Maximum cost, $150,000.

TORONTO, ONT.—The [illegible] ing the new $1,000,000 u[illegible] ronto for the Grand Trunk [illegible] to have been awarded to [illegible] posed of ROSS & McFARL[illegible] and WESTINGHOUSE-CH[illegible] 10 Bridge St., New York. [illegible] HASTINGS, 28 East 41st S[illegible]

WATER SUPPLY—I[illegible]RIGATION.

The names of parties awar[illegible] printed in capital

FARMINGTON, ME.—D. [illegible] Cik., writes us that contra[illegible] works has been awarded [illegible] STACY, Waterville, Me.

CHARLESTOWN, N. H[illegible] town meeting on March 1[illegible] purchasing its franchise fr[illegible] town Water & Power Co. and [illegible] to construct a new water [illegible] voted on.

SPRINGFIELD, MASS.—[illegible] until noon, March 19, for [illegible] tion with the construction [illegible] termittent sand filters. The [illegible] is as follows: Excavating and [illegible] cu. yds. of filter sand and [illegible] cu. yds. of concrete masonry [illegible] 12,750 lin. ft. of lateral drain[illegible] ridge, Engr. Water Dept. Ha[illegible] Consult. Engrs., 220 Broadway, New York. Plans and specifications are on file at office of Engineering News, New York. (Advertised, Engineering News.)

PROVIDENCE, R. I.—Otis F. Clapp, City Engr., is preparing plans for covering the eight filtration beds at Pettaconsut. As arched and a flat floor are being considered. Concrete probably will be used.

ROCHESTER, N. Y.—It is reported that the city will install about 15,000 meters. Edwin A. Fisher is City Engr.

NICHOLS, N. Y.—James G. Vought has been granted the franchise to construct water-works, at a maximum cost of $20,000. The work to be completed by Oct. 1, 1908.

ALBION, N. Y.—It is reported that the Albion Water-Works Co. proposes to construct a reservoir on Otter creek, the water to be pumped to a filter bed near the pumping station and allowed to filter into the wells. The village trustees have given their consent to this proposition, providing the water is pure and fit for domestic use.

NEW YORK, N. Y.—Preparatory to carrying out the plan of building a new $10,000,000 filtration plant for city water, the Aqueduct Commissioners on Feb. 21 instructed their engineers to report within the next 30 days full plans for roofing over the east reservoir at Jerome Park. Comptroller Herman A. Metz introduced a resolution calling on the engineers to make a prompt report as to the cost of the change at Jerome Park. Noted on Feb. 15.

NYACK, N. Y.—A proposition to raise $18,000 for an additional water main between Nyack and West Nyack will be submitted to the voters at the next election.

LOCKPORT, N. Y.—A press report from Niagara Falls states that Julius F. Frehse, City Engr., has completed the preliminary survey of the proposed route of the water supply from the Niagara River near Gratwick to Lockport and the maps to be sent to the state water supply commission are now being prepared. The work of making a detailed survey is now under way and soundings of the river will also be made.

ROCHESTER, N. Y.—Bids for furnishing 5,000 meters with the privilege of ordering an additional 5,000 at the contract price were opened Feb. 21. Hersey Manufacturing Co. and the National Meter Co. both bid $[illegible] per meter. The contract will probably be divided.

ALBANY, N. Y.—After having on two prior occasions rejected the bids, the Board of Contract has awarded the contract for two pumping engines to the HOLLY MANUFACTURING CO., of Buffalo, on a bid of $139,700.

LYON FALLS, N. Y.—We are officially informed that the contract for gravity water system extension has been awarded to MARSDEN & HUGHES, Utica, N. Y. Knight & Hopkins, Rome, N. Y., are Engrs.

ALBANY, N. Y.—The Board of Contract and Supply has awarded to the HOLLY MANUFACTURING CO., of Buffalo, at $139,790, the contract for furnishing two vertical triple expansion, condensing crank-and-fly wheel, pumping engines. Each engine is to have a capacity of 10,000,000 gallons a day.

ORANGE, N. J.—The plan for improving the Orange water system, which includes laying a main from the reservoir on Chestnut St., Orange Valley, the water to flow down by gravity, the abandonment of the pumping plant at Campbell's Pond, the consolidation of the sewage and water pumping plants on the city property in the Valley and a distributing reservoir at an elevation of about 420 feet, has been adopted by the common council. It is estimated that the plant will cost $250,000. Fred. T. Crane is City Engr.

HADDONFIELD, PA.—This city contemplates an issue of bonds for $94,000 for a new water-works system.

PERTH AMBOY, N. J.—Bids are asked until Mar. 14 by Adam Eckert, Clk., for furnishing and laying about 2,000 ft. of 8, 10 and 30-in. water pipe at Runyon, N. J. S. J. Mason is Engr.

ATLANTIC CITY, N. J.—Specifications and bidding sheets for two 200-HP. boilers for the pumping station are on file at the Engineering News, New York. (Advertisement Engineering News.)

ASBURY PARK, N. J.—The city council has decided to install a new system of water supply and fire purposes at a cost of $175,000. The new system will be entirely independent of the present artesian system. John Coffin is Supt. Sewer and Water Department.

WILMINGTON, DEL.—The contract for furnishing a 12,000,000-gallon pumping engine for the Wilmington's new water system was awarded to the HOLLY MANUFACTURING CO., of Buffalo, by the Board of Water Commissioners, the contract price being $79,769. This bid was the only one received.

FRANKLIN, VA.—Bids are asked until 1 p. m., March 27, for the construction of water works and sewerage system. There will be required about 350 tons of cast-iron pipe, tower and tank, steam pump and connections, hydrants, valves, boxes, etc. The sewerage system will include 20,000 ft. of 6, 8, 10 and 15-in. salt-glazed sewer pipe, etc. W. T. Pace is Recorder. (Advertised Engineering News.)

NORFOLK, VA.—Bids were opened Feb. 16 for the enlargement of the coagulating basin. They were as follows: Southern Construction Company, concrete, $24,200; wood, $30,000. E. Tatterson, wood, exclusive of pipe line and sluice gate, $25,000; concrete, same exclusive, $31,000. Bell Engineering & Construction Company, through A. C. Freeman, Jr., steel and concrete, $24,944. The city councils have appropriated $25,000 for the work.

PIEDMONT, W. VA.—The H. C. BROOKS CO., of Fairmont, W. Va., has secured the contract for the construction of the gravity water system at $42,600. The Savage River will be the source of supply.

PARKERSBURG, W. VA.—Contract for laying new water mains in various parts of the city has been awarded CON. KENNEDY, the lowest bidder.

KEY WEST, FLA.—We are officially advised that the contract for constructing reinforced concrete reservoir cisterns at Key West Barracks has been awarded to the ABBOT-GAMBLE CO., 32 Broadway, New York.

NEW DECATUR, ALA.—We are officially advised that the construction of a filtration plant is proposed by the Decatur Water-Works Company, Edwin G. McInnes, Gen. Mgr., 60 State St., Boston, Mass.

DONALDSVILLE, LA.—Bids are asked until March 21 for the construction of a water-works system. Chas. Maurin is Mayor.

EUNICE, LA.—The town council has begun negotiations for the installation of a water-works system.

MADISONVILLE, KY.—E. C. Anderson has applied to council for franchise to install and operate a water-works system.

YOUNGSTOWN, O.—The board of public service is considering improvements in the water-works department, which will provide the Lansingville district with an adequate supply, and which will give the pressure necessary to furnish a water supply to the East End hill distict. An expenditure of $15,000 is contemplated. F. M. Lillie is City Engr.

NORWOOD, O.—Bidding sheet for sewers to be constructed as noted Feb. 22 is on file at office of Engineering News, New York.

PAINESVILLE, O.—The city officials are considering the proposed installation of sand filters at a cost of $25,000. The people may vote on the question of issuing bonds, according to reports.

CANTON, O.—The city council has appropriated $11,149 to be used in extending water mains.

CINCINNATI, O.—Bids are asked until noon, March 23, by the commissioners of water-works, for laying 11,930 lin. ft. of 20-in. cast-iron pipe in two sections. Aug. Herrmann, Pres., Elmer G. Prior, Clk. (Advertised, Engineering News.)

EVANSVILLE, IND.—Bids are asked until March 17 for the construction of sewers in several streets. W. F. Wunderlick, City Clk.

ISHPEMING, MICH.—It is reported that council is considering appropriation of $5,500 for a 3,000,000-gallon pumping engine. P. Devine is Supt. Bd. Pub. Works.

ROCKFORD, ILL.—According to Supt. Phinney, of the Water Dept., plans for laying about four miles of mains will be announced in about two weeks.

ALTON, ILL.—A syndicate headed by Wm. E. Smith has been organized to purchase the water-works plant for $220,000. Improvements to cost $125,000 will be begun at once. George Gray is City Clk.

MOLINE, ILL.—We are officially informed that contracts for 18,700 ft. of water main and 23,200 ft. of sewer pipe has been awarded to the KING LAMBERT CONSTRUCTION CO. The bid was $38,738.14. Clark G. Anderson is City Engr.

AURORA, ILL.—This city is agitating the water-works question and it is thought that a new system will be installed.

KILBOURN, WIS.—A company has been incorporated to develop water-power at this place by damming the Wisconsin River. A plant to develop 7,000-HP. is contemplated.

ALBIA, IA.—This city has voted to build a complete water-works system.

BELLE PLAINE, IA.—Bids are asked until 2 p. m., March 23, for steel tower, wooden tank, pipe, hydrants, pumping station, engines, pumps and reservoir. Iowa Engineering Co., 410 Weston Block, Clinton, Iowa, is Engr. S. P. Van Dike is Clk.

ALBIA, IA.—The proposition for establishing a system of water-works to be owned by the city was carried by a vote of 453 to 83, at a special election.

MONTEZUMA, IA.—An issue of $5,000 of city bonds to cover the cost of leading a stream to the city for water supply has been authorized. The work will begin in the early spring.

ST. MARYS, KAN.—This city will build a system of water-works, including stand-pipe, mains, hydrants and a gas engine, at an estimated cost of $7,000. Walter Crawford, Topeka, Kan., is Engr.

LARAMIE, WYO.—The city council has decided to hold a special election for the purpose of voting on the issue of $80,000 of bonds to defray cost of improving the water system.

LARAMIE, WYO.—Council has taken steps for holding a special election in a short time on a proposition to vote $80,000 of bonds for rebuilding the city water system.

GLENDIVE, MONT.—Bids are asked until 10 a. m., March 19, by Hans J. Halvoisen, City Clk., for the construction of a water-works system. The work includes a 300,000-gallon reservoir, a steam pumping plant, pipe laying, valves, hydrants, pipe, etc. (Advertised, Engineering News.)

BILLINGS, MONT.—W. H. Scott, Engr., of Seattle, Wash., has submitted three reports to the city council regarding an improved water supply. The first is a gravity system to supply 3,500,000 gallons per day, and its estimated cost is $315,735; the second is a plan to build a pumping plant in connection with the present system, which would cost $101,430 and supply 4,000,000 gallons per day; the third was a report showing the value of the plant now in use to be $84,572.

DALLAS, TEX.—Bids are asked until March 20 by E. L. Dalton, City Engr., for repairing a 42-in. reinforced concrete conduit 13,500 ft. long. (Advertised Engineering News.)

MARLOW, IND. T.—Bids are asked until March 21 by Mayor W. B. Anthony for the construction of a water and light system. There will be required boilers, pump, engine, A. C. generator, switchboard, cast-iron pipe, standpipe, valves and hydrants. Specifications can be had by addressing the O'Neil Engineering Co., Dallas, Tex. (Advertised Engineering News.)

GREELEY, COLO.—We are officially advised that the contract for construction of water-works at this place was awarded to the JACOBSEN BADE CO., of Portland, Ore., at $323,869.82. Noted fully Feb. 22.

GOLDEN, COLO.—Bids will be received by the city of Golden until March 6 for furnishing material for water-works.

SEATTLE, WASH.—Bids have been opened for the standpipe in Volunteer Park. Moran Bros. were the lowest bidders on steel work, at $24,965. T. Ryan lowest on masonry, at $19,500.

SEATTLE, WASH.—The contract for constructing the standpipe proper in Volunteer Park, this city, has been awarded to MORAN BROS. CO., Seattle, Wash., at a contract price of $24,960. Time of completion, Sept. 15, 1906. The contract for the masonry portion of the work has not been awarded, but will, in all probability, be awarded to T. Ryan, Sullivan Block, Seattle, Wash., at a contract price of $19,500. This bid is for the use of clinker brick.

SEATTLE, WASH.—Ordinance has been passed providing for new water mains, at cost of $31,580. R. H. Thompson is City Engr. Contracts probably will be let this year.

ISLAND CITY, ORE.—City is preparing to spend several thousand dollars on the construction of a water system and installation of a fire department. A reservoir will be built in the western part of the city and an electric pump will be installed.

McMINNVILLE, ORE.—The contract to construct a complete gravity water system has been awarded to the NATIONAL WOOD PIPE CO., Olympia, Wash., on a bid of $50,000.

PORTLAND, ORE.—Bids are asked until March 14 for 100 fire hydrants. Frank T. Dodge, Supt. Water Dept.

MARTINEZ, CAL.—Arthur H. Markwart, managing engineer of the Syndicate Water Co., announces that his company will immediately undertake the building of a 12-in. main from Richmond plant up to Clancy reservoir site on San Pablo Creek.

OAKLAND, CAL.—The Syndicate Water Company has purchased the Tewksbury ranch of 1,650 acres, bordering on Wild Cat Creek, and has by the same transaction acquired the Richmond Water System, which supplies the town of Richmond and adjacent territory. The price paid was $400,000. We are informed that work has begun on a dam to enclose the mouth of Wild Cat Canyon and several new wells are being sunk. The new reservoir, when completed, will hold 800,000,000 gallons. Louis Titus is in charge of the work.

PASADENA, CAL.—The Pasadena Park Development Co. has finished sinking wells and will erect a powerful pumping plant immediately.

SANTA ROSA, CAL.—The city council has accepted the bid of the SANTA ROSA LIGHTING COMPANY to install an electric pumping plant, pump the water and light the streets of the city all night every night in the year, for $833.33 a month.

SAN DIEGO, CAL.—The board of public works will receive sealed bids up to 10 a. m., March 1, for 200 lengths of 6-in. cast-iron water pipe and 985 lengths of 4-in. cast-iron water pipe, in accordance with plans and specifications on file in office of said board.

GARDNERVILLE, NEV.—We are informed that Fred. Dangberg has begun preliminary surveys for an immense private reclamation scheme. He will build several storage reservoirs on the upper part of the Carson River from which he will build a large canal to run through the valley.

ST. STEPHEN, N. B.—A new water system to cost $90,000 has been authorized.

FREDERICTON, N. B.—The city council at a special meeting has unanimously voted in favor of installing a modern filtration plant in connection with the water system at a cost of $45,000. Voted on Feb. 22.

ROSTHORN, SASK.—A water-works system will be installed in the near future.

ST. STEPHEN, N. B.—It is reported that an election probably will soon be held to vote on issuing $30,000 of bonds to construct water works, taking water from Dennis Stream, about 4 miles from the town. F. A. Barbour, Engr., of Boston, Mass., is reported to have conducted tests and found them satisfactory.

SEWERAGE.

The names of parties awarded contracts are printed in capital letters.

KEENE, N. H.—City council has passed a resolution to spend $10,000 for a sewerage system.

WOODSTOCK, VT.—We are officially advised that bids are asked until 11 a. m., March 15, for laying about 20,000 ft. of 8-in. vitrified pipe sewerage, and for 50 manholes. Specifications and bidding sheets for this work are on file at the office of Engineering News, New York. Fred. Chapman, Clk. Village Trustees.

MARION, MASS.—Bids have been received for 17,500 ft. of sewer pipe as noted in Engineering News Feb. 8. The lowest bids were those of H. G. Crocker, Quincy, Mass., at $12,814, and Edw. B. Roberts, Old South Bldg., Boston, at $12,253. The lowest bidder for the sand filters was E. B. Roberts at $1,365, and for the reservoirs was Andrew D. Fuller at $2,316.

MOHAWK, N. Y.—Bids have been received for new sewer system, the lowest being those of Burt Carrsson Co., of Gloversville, at $31,820, and Samuel Bonn, of Syracuse, at $30,097.

CORTLAND, N. Y.—Plans for sewerage extension to cost $14,700 have been prepared by City Engr. Morrison and have been accepted by the Board of Public Works.

LESTERSHIRE, N. Y.—Plans for an extension of the sewerage system are being prepared. A. H. Seymour is the Clerk.

BUFFALO, N. Y.—Bids for sewerage construction in various parts of the city have been received. The lowest bidders were: for sewer on Wilkes Ave., William Franklin, Jr., at $2,950; on Delaware Ave., John Johnson and F. J. Mumm, at $2,297, and for the rest G. W. Moore, at $4,940.

WATERTOWN, N. Y.—We are officially advised that this city is planning a large amount of sewerage construction during the coming season. Geo. W. Carpenter is City Engr.

BINGHAMTON, N. Y.—It is said that this city is prepared to go ahead with sewerage construction at an estimated cost of about $15,000.

CAMDEN, N. J.—Bids are asked until March 20 for line ditch sewer. L. E. Farnham is City Engr.

MOUNT CARMEL, PA.—Bids are asked until 8 p. m., March 15, by T. Chalkley Hatton, Consulting Engr., for the completion of a system of sewers. The work to be done consists of approximately five miles of terra cotta pipe sewers and appurtenances. (Advertised, Engineering News.)

WASHINGTON, D. C.—Bids are asked until noon, March 19, by the district commissioners for constructing outlet section and tide gate chambers, 4½ ft. high level intercepting sewer. (Advertised, Engineering News.)

WASHINGTON, D. C.—Bids were received Feb. 26 at offices of the District Commissioners, Washington, for the construction of a sewer. The following bids were received, unit prices being given: (1) ordinary excavation; (2) red brick masonry, laid in Portland cement; (3) vitrified brick masonry, laid in Portland cement; (4) concrete, B; (5) concrete, C (prices per cu. yd.); 24-in. pipe sewer, per linear foot: G. G. Gummell, Eckington, D. C., (1) 75 cts., (2) $18, (3) $24, (4) $8, (5) $7, (6) $1.40; James A. Coit, (1) 50 cts., (2) $14, (3) $16, (4) $7.25 (5) $7, (6) $1.50; John Hirsh, (1) 72 cts., (2) $14.25, (3) $16.25, (4) $9.85, (5) $9.65, (6) $1; J. Connelly Construction Co., 3d and Canal Sts., S. W. Washington, (1) 66 cts., (2) $14.75, (3) $19.50, (4) $8.33, (5) $8.50, (6) $1.20; Frank W. Troth, (1) 94 cts., (2) $15.75, (3) $19.74, (4) $8.36, (5) $8.10, (6) $1.25; R. J. Beall Construction Co., 1217 F St., N. W., Washington, (1) $1.10, (2) $16.50, (3) $20, (4) $8.98, (5) $8.80, (6) $1.75. J. F. Tolvert, (1) 79 cts., (2) $15.50, (3) $19.50, (4) $8.50, (5) $8, (6) $1.25.

ROANOKE, VA.—Bids are asked until noon, March 14, by W. E. Thomas, Clk. of Councly, for improving Campbell Ave. drain, as noted in issue of Feb. 22.

WHEELING, W. VA.—Contract for the construction of North Third St. sewer has been awarded to GEORGE CLIFFORS, of Wheeling.

CHARLESTON, S. C.—J. H. Dingle, City Engr., has been instructed to provide the sewerage commissioners with estimates of the cost of extending the Shone sewerage over the entire city.

SPARTANBURG, S. C.—See under Streets and Roads.

SPRINGFIELD, O.—Board of Public Service has directed W. H. Sieverling, City Engr., to prepare plans for sewers in two streets.

AKRON, O.—Projected storm water conduit to cost about $33,500 will probably be built this spring.

CLEVELAND, O.—Bids are asked until noon, March 8, for sewerage construction in several streets. W. J. Springborn is Pres. Bd. of Pub. Service.

MIDDLETOWN, O.—JOHN ARPP, JR., of this place, has been awarded contract for new sewer in Yankee Road.

MT. VERNON, O.—We are advised that this city will let contract for sewer construction as soon as plans have been prepared.

LEBANON, O.—Bids are asked until noon, March 16, by R. B. Corwin, Clk., for building a main sewer.

EVANSVILLE, IND.—The Kentucky Ave. sewer will be build under the supervision of the city board of public works and under the terms of the "general law," which provides for sewer construction in the new codification act. Bids will be asked in a short time. A. Saunders is City Engr.

PRINCETON, IND.—Edwyn E. Watts, the engineer who has charge of the preliminary survey for the proposed sewerage system for the city of Princeton filed his report. The septic tank method is the one recommended by the engineer, at an estimated cost of $14,000.

WABASH, IND.—Bids are asked until March 12, by Fremont McLees, City Clk., for sanitary sewer in Miami St.

JEFFERSONVILLE, IND.—The Board of Public Works is considering a plan for a sewer to run from Ekin Ave. south on Mechanic St. to the river, to be 36 ins. in diameter.

DETROIT, MICH.—JOHN S. AFFELD & SON, of this city, have been awarded contract for the erection of new lateral sewers.

LANSING, MICH.—Bids are asked until 7:30 p. m., March 5, by Myles F. Gray, City Clk., for sewers in various streets.

ROCHELLE, ILL.—Bids were received on Feb. 15, by the Board of Local Improvement, for construction of about 10½ miles of sanitary sewers. The bidders were: Des Moines Bridge & Iron Works, Des Moines, Ia., $56,344; E. T. Webster, Chicago, Ill., $51,438; Thomas J. Peter Co., Chicago, $51,957; G. MAFFIOLI, Rockford, Ill., $40,814 (awarded contract); Harding & Nelson, Racine, Wis., $49,939 and $42,895; John Green, Chicago, $44,702; M. H. McGovern, Chicago, $54,330. The Iowa Engineering Co., of Clinton, Ia., is Engr.

MOLINE, ILL.—The Board of Local Improvement has awarded contract for bluff sewer and water mains in the Fifth Ward to KING-LAMBERT CONSTRUCTION CO., of Des Moines, Ia., at $38,738.

OSHKOSH, WIS.—Sewers in twelve streets are being planned for construction during the coming year.

CLINTON, IA.—The PEOPLES CONSTRUCTION CO., of this city, has the contract for erection of a sewer here.

DAVENPORT, IA.—The KING-LAMBERT CONSTRUCTION CO., of Des Moines, Ia., has been awarded contract for construction of the bluff sewer here.

CEDAR RAPIDS, IA.—Bids for the big group of storm water sewers to be built in various parts of the city have been received. The bid of William King at $13,795 was lowest.

PONCA, OKLA.—This city will issue $15,000 bonds for the erection of a new sewer system.

OKLAHOMA CITY, OKLA.—Bids are asked until 6 p. m., March 19, by W. C. Burke, City Engr., for the construction of a main storm and sanitary sewer system.

CLEVELAND, OKLA.—We are officially informed that this city has sold $20,000 of sewer bonds and will shortly advertise for bids. D. B. Merry is Engr.

SEATTLE, WASH.—Ordinance has been passed providing for sewer work, to cost $110,330. R. H. Thompson is City Engr. Contracts probably will be let this year.

TACOMA, WASH.—Contract has been awarded to PELLEGRIN & RICCO for construction of sewer in the Alliance addition, formerly known as the Nigger Tract, at $5,998.

PORTLAND, ORE.—Contract has been awarded to the STANDARD CONSTRUCTION CO. for sewer on Washington St. at $3,981. J. KEATING received the contract for sewer in Oak St. at $6,095.

SAN FRANCISCO, CAL.—The Board of Public Works has passed a resolution to build a main intercepting sewer in the North Beach district at an estimated cost of $50,000. Thos. P. Woodward is City Engr.

PASADENA, CAL.—The city engineer has submitted a report recommending a sewer in certain streets. 8-in. pipe probably will be used. Estimated cost is $5,488.

FRESNO, CAL.—Contract for sewer work has been awarded the WORSWICK STREET PAVING CO., Fresno, at about $145,000, as noted in Engineering News Feb. 22.

REDONDO, CAL.—At a special election $80,000 has been voted for a sewer system.

GARBAGE DISPOSAL.

The names of parties awarded contracts are printed in capital letters.

OSWEGO, N. Y.—Plans, specifications and blank proposals for a crematory building and garbage crematory at Fort Ontario, N. Y., are on file at the office of the Engineering News, New York. Bids are asked until 10 a. m., March 22, as advertised in Engineering News.

WINNIPEG, MAN.—It is proposed to enlarge the garbage crematory, at a cost of $18,200. H. N. Ruttan is City Engr.

STREETS AND ROADS.

The names of parties awarded contracts are printed in capital letters.

BEVERLY, MASS.—Bids for building a section of the state highway in this city were opened Feb. 20, and the contract awarded to JOHN A. GAFFEY, Medford, Mass., whose bid was $5,865.

BUFFALO, N. Y.—Bids for paving several streets have been received by the commissioner. The German Rock Asphalt Co. was the lowest bidder, at $5,880, for paving Maryland St. from Prospect Ave. to Cottage St., at $6,610 for repaving Harmonia St. between

Sycamore and Walden Aves., at $4,300 for repaving South Division between Ellicott and Michigan, and at $6,265 for repaving Whitney Place between Maryland and Hudson and Pearl Sts., Virginia and Allen Sts. The Barber Co. was the lowest bidder for repaving Seneca St., between South Park Ave. and Kemper St., at $11,330.

BUFFALO, N. Y.—Bids for paving Good Ave., Sydney St. and Sherwood St. have been received. The lowest bidder was the Barber Asphalt Co. at $14,816.

BUFFALO, N. Y.—Bids for paving several streets have been received. The German Rock Asphalt Co. was low bidder on five streets at $23,055, and Barber Asphalt Co. on one street at $11,330.

CORNING, N. Y.—Plans, specifications and blank proposal for paving as advertised in Engineering News of Feb. 22 are on file at office of Engineering News, New York. L. Van Gilder is Engr. and Supt.

NEW YORK, N. Y.—Bids were opened on Feb. 7 by Louis F. Haffen, Pres. Bronx Boro., for regulating, grading, setting curb and flag on W. 165th St., from Sedgwick to Ogden Ave. The lowest bidder was J. B. Malletesta, 3172 Jerome Ave., at $9,972.

NEW YORK, N. Y.—Bids are asked by John F. Ahearn, Pres. Boro. Manhattan, until 3 p. m., March 7, for regulating and paving with asphalt block pavement on concrete foundation, and also for paving with granite block pavement on concrete foundation.

Board of Estimate acted favorably on a resolution to place a sewer in 14th Ave., between 65th and 75th Sts. The estimated cost of the sewer is $27,000.

Board of Estimate has decided definitely on the extension of Grand St., the widening of Roebling St., in Brooklyn, and the extension of Flatbush Ave. The necessary property will be condemned immediately, and it is expected that the work of demolition will begin in June.

NEW YORK, N. Y.—It is announced that all bids received on Feb. 8 by Louis F. Haffen, Pres. Bronx Boro., for regulating, etc., Hunts' Point Road, from South Boulevard to East River, have been rejected, and new bids will be received on March 1. The following are the bids for this work received on Feb. 8: P. J. Kane, $88,325; W. F. Murray, $87,621; J. J. Hart Co., $83,420; G. L. Brown, $82,788; P. J. Duffy, $110,640; C. W. Collins, $81,200; D. W. Moran, $106,848; J. C. Voorhies, $91,516; J. Deering, $56,070; Cunningham & Kearns, $111,300; J. C. Rodgers, $89,096; A. G. Vermilye, $84,300.

NEW YORK, N. Y.—The bids received on Feb. 14 by Bird S. Coler, Pres. Brooklyn Boro., for repairing and maintaining asphalt pavements in various streets in the Borough of Brooklyn, were as follows: Cranford Co., 52 Ninth St., Brooklyn, $50,050; Uvalde Asphalt Paving Co., 1 Broadway, New York, $61,900; BARBER ASPHALT PAVING CO., 114 Liberty St., New York, $47,885 (awarded contract).

CORTLAND, N. Y.—Preliminary surveys are being made for the improvement of Main St. S. Allen Mead is Town Clerk.

ROCHESTER, N. Y.—Common council has passed an ordinance providing for paving, curbing and constructing a sidewalk on Hudson Ave. Estimated cost is $34,000. Ordinances providing for the paving of Anderson Ave., at $22,000; Ave. D., $34,000; Park Ave., $29,000; Milburn St., $22,000; 4th St., $25,000; 24 St., $12,000; Sullivan St., $10,000, and Cleveland Place, $6,000, were also passed. Edwin A. Fisher is City Engr.

ROCHESTER, N. Y.—The city council here has adopted resolutions providing for the paving of several of the streets.

OSWEGO, N. Y.—The Barnett Contracting Co. was lowest bidder for paving Bridge and Water Sts. Bids opened Feb. 7. Charles H. Snyder is City Engr.

SYRACUSE, N. Y.—Bids for repairing asphalt pavements for 1906 are said to have been opened by the board of contract. Warner-Quinlan Asphalt Co. was lowest bidder at $1.35 per square yard. F. J. Schnauber is City Engr.

SALAMANCA, N. Y.—Special election will soon be held to vote on paving propositions involving an expenditure of $32,000. C. Buckmaster is Vil. Clk.

BRIDGETON, N. J.—The council is about to place a contract for $25,000 worth of macadam street improvement.

SEA ISLE CITY, N. J.—LINWOOD W. DALLAS, of this city, has been awarded the contract to build a board walk on ocean front at $8,000.

MEADVILLE, PA.—Bids are asked until 8 p. m., March 7, by the common council for paving Park Ave. with asphalt block. The work also includes 5,975 ft. of curbing, 200 ft. of edge stone and 3,470 ft. of storm sewer. Specifications and bidding sheet may be had at the office of H. S. Robinson, City Clk. (Advertised, Engineering News.)

FARMINGTON, DEL.—Plans for rebuilding the New Castle road have been approved by the street directors.

BALTIMORE, MD.—The board of awards has issued specifications for paving Fayette St. and courthouse plaza with wood blocks; Calvert St., between Fayette and Lexington Sts., with creo-resinate wood block pavement; Lexington St., between Calvert and Charles Sts., with vitrified brick; grading and paving Patuxent St., between Baltimore St. and Eastern Ave., with asphalt blocks; dredging for the harbor board; erecting stone and timber bulkhead in back basin, and erecting No. 28 engine house, Guilfors and Mount Royal Aves.

WASHINGTON, D. C.—It is reported that plans have been completed by the War Dept. for the construction of a road to Arlington and Ft. Meyer, via the new highway bridge.

SPARTANBURG, S. C.—Bids are asked until 4 p. m., March 26, by the city clerk for paving portions of East Main St., North Church St., South Church St. and Walnut St. with vitrified brick, bitulithic or bituminous macadam or asphalt rock. The surface to be covered is approximately 55,000 sq. yds. Bids are also asked until 4 p. m., March 26, for 50 catch basins and 12,000 ft. of storm sewers. Fred L. Bryant is City Engr. (Advertised, Engineering News.)

AUGUSTA, GA.—Specifications are on file at offices of Engineering News, New York, Chicago and Washington for paving several streets with brick or Belgian blocks. Bids are asked until March 1, as advertised in Engineering News.

WAYCROSS, GA.—The Deen Realty & Improvement Co., C. J. Thomas, Secy., writes us that it is proposed to grade about 100 miles of streets and roads this season. The land is level, and the soil is clay and sand mixed, and there are no rocks. C. J. Thomas is City Engr.

SAVANNAH, GA.—Bids are reported to have been opened Feb. 6 for furnishing about 40,000 sq. yds. of vitrified brick. Graves Shale Brick Co., of Birmingham, was lowest bidder, at $1.08 per sq. yd.

PLANT CITY, FLA.—Town has voted $7,000 of bonds for street paving and drainage purposes. Address Town Clerk.

SHREVEPORT, LA.—The CLEVELAND TRINIDAD PAVING CO. has been awarded the contract for paving. Noted in issue of Feb. 1.

MERIDIAN, MISS.—WM. F. BOWE, of Augusta, Ga., has been awarded contract for cement platforms, streets and sidewalks around the new Union Station. The work is in charge of Architect F. P. Milburn, Columbia, S. C.

MEMPHIS, TENN.—It is reported that Poplar St. will be paved at an estimated cost of $75,000. J. A. Omberg, Jr., is City Clk.

MEMPHIS, TENN.—Bids are asked until noon, March 10, for furnishing the engineering department of this city with various supplies for the current year, such as paving brick, limestone macadam, gravel, cement, etc. Ennis M. Douglass, City Register. Jas. M. Malone, Mayor.

KNOXVILLE, TENN.—Capt. W. C. Crozer, City Engr., is busy, according to press reports, preparing estimates on paving, to cost $80,000.

NEW ALBANY, KY.—The board of public works has awarded the contract to pave Vincennes St. to the MARION CONSTRUCTION CO., of Indianapolis, Ind., at $4.70 per foot.

CAMBRIDGE, O.—City council has passed ordinances for paving several streets. Details will be worked out at later meetings.

CLEVELAND, O.—Bids were received on Feb. 7 by the board of public service for paving Superior Ave. The lowest bidder was the Northern Ohio Paving & Construction Co., of Cleveland, O., at $28,256. This company was also the lowest bidder for paving a number of other streets, their bid totaling $89,453.

BOWLING GREEN, O.—The sale of paving bonds amounting to $50,000 is reported.

TOLEDO, O.—Bids are asked until March 5 by the board of public service for grading, curbing and paving a portion of Hamilton St. with either vitrified brick, asphalt, creosoted wood block, sheet asphalt or Medina block stone. Reynold Voit, Secy.

DANVILLE, IND.—The town board will soon ask for bids for grading, improving, paving streets and laying concrete sidewalks.

NEW ALBANY, IND.—THE MARION CONSTRUCTION CO., of Indianapolis, is reported to have secured the contract for paving Vincennes St. with brick, at $60,000.

JEFFERSONVILLE, IND.—Victor W. Lyon, City Engr., is said to be making plans for reconstructing two miles of sidewalk, to be granitoid with granitoid combined curb and gutter.

VALPARAISO, IND.—Bids are asked until March 5 by the commissioners of Porter county for the construction of about 20 miles of gravel road.

SHELBY, MICH.—Bids are asked until March 17 by G. E. Duvey, Comr., for grading and macadamizing about 1½ miles of road. F. F. Wetmore, of Pentwater, is Engr.

HOUGHTON, MICH.—Bids for paving streets and the construction of sidewalks in Red Jacket have been received. The lowest bids for 93,000 sq. ft. of cement sidewalks were those of James Byers, of Houghton, and John T. McDonald, at $20,500. For street paving James Byers bid $154,000 for paving with creosote block, the Barber Asphalt Co. at $135,000 for asphalt, and R. S. Blome Co. at $110,000 for granitoid block. A. Clausen is City Engr.

CHEBOYGAN, MICH.—This city will pave its main street with brick this spring, the proposition to bond the city for the necessary funds carrying by over 300 majority. A distance of ten blocks will be paved at a cost of $50,000.

BAY CITY, MICH.—Bids are asked until 2 p. m., March 5, by G. Hine, Chn. Bd. Pub. Works, for paving with vitrified brick, asphalt or bitulithic pavement.

MENOMINEE, MICH.—Bids are asked until March 19 by Albert Hass, City Engr., for 11,500 sq. yds. brick paving and 11,000 sq. yds. macadam.

CHAMPLAIN, ILL.—It is planned to pave State St., Clark St. and Prospect Ave. at an estimated cost of about $50,000. The pavement will be brick on a concrete base. J. B. Fairclo is City Engr.

SPRINGFIELD, ILL.—It is reported that J. E. BRETZ, of Springfield, has secured the contract for 12,000 sq. yds. brick pavement on a 6-in. concrete foundation, asphalt filler, at $1.57 per sq. yd. and for 2,500 lin. ft. curb, 55 cts. per lin. ft.

DES MOINES, IA.—Bids are asked until March 10 by the board of public works for paving West 17th St. and Woodlawn Ave. with one course of No. 1 vitrified brick on a 6-in. concrete foundation with Portland cement top filler, requiring about 2,595 sq. yds.; also curbing with Portland cement Woodland Ave., about 1,224 lin. ft. W. W. Wise is Chn.

MINNEAPOLIS, MINN.—We are officially informed that the following proposals were received Feb. 23d, 1906, for paving and curb and gutter material: Vitrified block, 40,000 sq. yds., Bar Clay Co.; Streator, Ill., 99 cts. per sq. yd., special $1.10 per sq. yd.; Metropolitan Paving Brick Co., Canton, O., 96½ cts. per sq. yd., special 96½ cts. per sq. yd.; Purington Paving Brick Co., Galesburg, Ill., 86⁹/₁₀ cts. per sq. yd., special 86⁹/₁₀ cts. per sq. yd.; Flint Brick Co., Des Moines, Ia., 97½ cts. per sq. yd., special 97½ cts. per sq. yd.; creosoted blocks, 40,000 sq. yds., Republic Creosoting Co., Indianapolis, Ind., Norway $1.69, specials $1.74, Washington fir $1.77, specials $1.82, Southern pine $1.85, specials $1.93, filler 3 cts.; Kettle River Quarries Co., Minneapolis, Minn., $1.70, special $1.75, filler 3 cts.; sandstone blocks, 40,000 sq. yds., Kettle River Quarries Co., Minneapolis, Minn., $1.51, smooth dressed $1.61; cedar blocks, 10,000 sq. yds., Page & Hill Co., Minneapolis, Minn., 60 cts. per sq. yd.; crushed granite, 3,000 cu. yds., New Ulm Stone Co., New Ulm, Minn., $2.24 per cu. yd.; Duluth Crushed Stone Co., Duluth, Minn., $2.40 per cu. yd.; crushed lime stone, 15,000 cu. yds., Mineral Supply Co., Minneapolis, Minn., $1.00 per cu. yd.; asphalt resurfacing, 95,000 sq. yds., Barber Asphalt Co., Minneapolis, Minn., $1.60 per sq. yd.; sandstone curb, 10,000 lin. ft., Kettle River Quarries Co., Minneapolis, 58 to 70 cts.; granite curb, 5,000 lin. ft., Robt. Graham, St Cloud, Minn, straight, 65 to 80 cts. per ft.; Northwestern Granite Co., St. Cloud, Minn., straight, 63 to 73 cts. per ft; North Sioux Falls Granite Co., Jasper, Minn., straight, 95 to 95 cts. per ft. The city engineer is directed to buy Portland cement for paving and curb and gutter in the open market, all bids rejected. Andrew Rinker is City Engr., and Ellis R. Dutton, Asst. City Engr.

ST. PAUL, MINN.—Bids are asked until 10 a. m., March 5, for macadamizing roads in Ramsey County. Edw. G. Krahmer is County Audr.

ST. PAUL, MINN.—Bids are asked until 10 a. m., March 5, for steam roller and tool wagon. Edw. G. Krahmer, County Audr.

OTTAWA, KAN.—City council has passed a resolution providing for pavement and construction of sidewalk on Third St. J. H. Bell is City Clk.

LEES SUMMIT, MO.—J. H. BRIZEDINE, of this place, has been awarded the contract to macadamize the Lee's Summit and Greenwood road from the end of the present macadam to the bridge over Big Creek, near Greenwood, a distance of nearly five miles. The price to be paid is: Macadam, $1.25 per cu. yd.; bridge masonry, $5 per cu. yd., and culvert masonry, $4 per cu. yd.

HOT SPRINGS, ARK.—Bids are asked until March 5 for 27,000 sq. yds. of street paving. Frank Ellsworth is City Engr.

LITTLE ROCK, ARK.—We are officially informed that bids were received on Feb. 14 for paving Main St. and 15th and 16th Sts. The contract for Main St. was awarded JOSEPH McCOPPIN, of Little Rock, at $81,279, and for 15th and 16th Sts. to I. P. SHELBY, of Little Rock, at $78,957. Other bidders were (a) Coffeyville brick and (b) Pittsburg brick: 15th and 16th Sts.—De Jersey & Petty, Little Rock, Ark., (a) $78,757, (b) $79,280; C. T. Derr, Guthrie, Okla., (a) $81,411, (b) $81,947; Joseph McCoppin, Little Rock, Ark., (a) $74,725, (b) $78,305; I. P. Shelby, Little Rock, Ark., (a) $82,537, (b) $78,957; E. Swain, Fort Scott, Kan., (a) $74,725, (b) $78,305. Main St.—Joseph McCoppin, Little Rock, Ark. (a) $81,279, (b) $85,654; C. T. Derr, Guthrie, Okla., (a) $89,260, (b) $88,705; I. P. Shelby, Little Rock, Ark., (a) $87,309, (b) $87,986; Z. Ward, Little Rock, Ark., (a) $87,471, (b) $89,066; Eugene Swain, Fort Scott, Kan., (a) $90,285. E. A. Kingsley is City Engr.

LA PORTE, TEX.—Contract has been awarded W. S. HIPP for building a macadam road in Harris County, at $46,780.

LAWTON, OKLA.—Bids are asked until 6 p. m., March 6, for the construction of about ten blocks of cement sidewalks. W. R. Julian is City Clk.

HOULTON, ORE.—Bids are asked until March 7 by the county clerk for special road work and culverts. R. S. Hatton is County Judge.

SEATTLE, WASH.—Ordinances have been passed ordering street improvement work as follows: Grading, $502,540; paving, $133,800. R. H. Thompson is City Engr. Contracts probably will be let this year.

Bids are asked until March 3 by Mr. C. B. Bagley, Secy. Bd. Pub. Wks., for the paving of Tenth Avenue North with asphalt, at an estimated cost of $101,000; for grading East Spring St., at an estimated cost of $14,500, and for concrete sidewalks on Thirty-Second Ave., at an estimated cost of $6,600.

MANUFACTURING PLANTS.

The names of parties awarded contracts are printed in capital letters.

WESTBROOK, ME.—The Dana Warp Co. will build an extension to its gingham mill in a short time. New structure will be brick, three stories, 40 × 80 ft.

RANDOLPH, VT.—The Demerrit & Palmer Packing Co., recently incorporated, of Waterbury, will erect a canning factory here.

NEW BEDFORD, MASS.—John W. Knowles, it is stated, is interested in a new cotton mill to be erected on Orchard St., which will contain 51,000 spindles.

READVILLE, MASS.—C. A. DODGE & CO., 8 Beacon St., Boston, have been awarded the contract for locomotive shop for the New York, New Haven & Hartford R. R., at Readville, for $263,000.

BRIDGEPORT, CONN.—F. H. Bergmann, Los Angeles, Cal., has purchased the plant of the Columbia Nut & Bolt Co., and will remodel and equip same with special machinery.

NEW BRIGHTON (S. I.), N. Y.—James Whitford, Arch., Port Richmond, N. Y., is preparing plans for a new plant here for the Borden Condensed Milk Co., 108 Hudson St., New York. Estimated cost, $50,000.

BUFFALO, N. Y.—The [illegible]alo Crucible Casting Co. has been incorporated with a capital of $150,000 to manufacture crucible steel castings. A plant will be erected in the city. The directors are E. L. Osgood and A. W. Thorn[illegible]

PITTSBURG, PA.—It is [illegible] Crucible Steel Co. will erect a cost $1,000,000 for the pur[illegible] steel springs.

BALTIMORE, MD.—Lou[illegible] American Bldg., is preparing [illegible] tory for Price Bros., to be [illegible] mount Ave.

WASHINGTON, D. C.—RO[illegible] BURY has been awarded the [illegible] structing a 2-story factory [illegible] Iron & Wire Works. Elevato[illegible] cars, wrought iron, entrance [illegible] work will be manufactured. [illegible] Emil Schmid are Props.

DALLAS, N. C.—The Mona[illegible] Co. has applied for incorporat[illegible] stock of $100,000. It is the i[illegible] a 5,000-spindle mill for manu[illegible] A site has been secured and [illegible] prepared. The motive powe[illegible] tricity. The incorporators in[illegible] Lewis, of Dallas; J. R. Lewis, [illegible] J. B. White, J. W. Summey, [illegible] and E. L. Wilson.

WINSTON-SALEM, N. C.—[illegible] Pres. of the R. J. Reynolds [illegible] this city, has stated that the [illegible] creased its capital from $5,0[illegible] 000,000, and is planning to er[illegible] bacco manufacturing plant in [illegible]

LINCOLNTON, N. C.—The [illegible] of this city, has awarded co[illegible] BEALL, of Sumter, S. C., for [illegible] tion of the buildings for its [illegible] has been signed with STUART [illegible] of Charlotte, N. C., for the [illegible] he will also draw the plans [illegible] according to reports.

LAURINBURG, N. C.—The [illegible] Cotton Mills will build an addition [illegible] 8,000 more spindles. The constr[illegible] annex will begin at once.

NOCATEE, FLA.—The King Lumber & Mfg. Co. has been organized, with J. King, Pres., and A. McN. Page, V[illegible] Gen. Mgr. The company has purchased a plant, and will remodel and extend same at once.

LAUREL, MISS.—The Laurel Cotton Mills have awarded the contract for the erection of their additional building to the JEFFERSON CONSTRUCTION CO., of Birmingham, Ala., for $22,764. The new mill will be occupied with carding, spinning and preparatory machinery.

NEW ORLEANS, LA.—The White Cedar Pile & Pole Co., capital $100,000, has been chartered to do a manufacturing and lumber business, to manufacture poles, cleats, cross arms and to deal in wood used in the telephone and telegraph business. The officers are: W. M. Bancroft, Pres.; A. L. Phillips, Vice-Pres.; and John Dibert, Secy.-Treas.

MEMPHIS, TENN.—The Crane Co. of Chicago will erect a five-story steel construction warehouse and other buildings here at a cost of over $100,000, and establish a southern distributing depot in this city for its mill supplies.

JUNCTION CITY, O.—It is proposed by the East Ohio Sewer Pipe Co., of Irondale, O., to construct a plant at this city, it is reported. The company will operate here as the Junction City Sewer Pipe Co.

ORRVILLE, O.—The Cyclone Drill Co. recently incorporated with a capital of $100,000, will erect an addition to its present plant, 40 × 60 ft., and a blacksmith shop, 40 × 60 ft. B. S. Cope is Pres. and William M. Knoppes, Secy.

SHELBYVILLE, IND.—The Root Furniture Co. has ordered plans for the construction of a new factory plant in this city, according to reports. Hiram J. Root is Pres.

MADISON, IND.—The Columbus Handle & Tool Co., of Columbus, Ind., has secured a site in this city and will ask for bids soon for the construction of a factory building of large dimensions.

ELWOOD, IND.—The Elwood Iron Works plant is reported to have been purchased by capitalists and will be remodeled and the capacity increased. A testing laboratory will be constructed at once. Bids will be asked as soon as plans are completed. M. J. Fogarty is Mgr.

MOROCCO, IND.—A new cement plant will be established here by local capital. Estimated cost, $20,000. John D. Kessler is interested.

INDIANAPOLIS, IND.—The Climax Machinery Co., of this city, has been incorporated, with a capital stock of $150,000. The company will conduct a general machine shop and manufacturing business, making a specialty of a line of threshing machine attachments. Incorporators are: Chester Bradford, James E. Lilly, R. B. Hilleary, George W. Faris, Arthur A. McKain, Theophilus King and Chas. E. Sloan.

MT. CARMEL, ILL.—The contract for the construction of shops and roundhouse for the Cleveland, Cincinnati, Chicago & St. Louis R. R. Co. has been awarded to H. H. DOLLMAN, 146 East Market St., Indianapolis, Ind. Estimated cost, $160,000.

MILWAUKEE, WIS.—The Provost Steel Tank Co. has had plans prepared by C. D. Crane, Arch., 91 Wisconsin St., for its one-story brick factory additions, 40 × [illegible] ft. and 40 × 244 ft.

KENOSHA, WIS.—The Four Wheel Drive Wagon Co., Milwaukee, maker of heavy commercial automobiles, is negotiating for a site for a new factory here; $500,000 will be spent in building a plant, according to reports, if site is secured. Nelson P. Hulst, Milwaukee, is Pres.

WEBB CITY, MO.—The Underwriters' Land Co. will erect a concentrating plant with a capacity of 1,000 tons per day. W. R. Calkins is Mgr.

SIOUX CITY, IA.—J. M. Lewis, Des Moines, is reported to be Engr. for the new $100,000 plant consisting of a main factory, 90 × 320 ft., two smaller warehouses, for the Morley Co., at Seventh and Division Sts.

ST. PAUL, MINN.—The Seeger-Gallasch Refrigerator Co. has been incorporated to manufacture refrigerators, etc., and will erect a plant here. A. Seeger, A. G. Gallasch and H. M. [illegible], of this city, are incorporators.

ST. LOUIS, MO.—We are officially advised that the Gilleland Car & Foundry Co. will be of reinforced concrete construction, and the cost of the equipment is estimated at $2,000,000. H. Gilleland is Pres.

PINE BLUFF, ARK.—BOYCE ENGINEERING CO., St. Louis, Mo., has been awarded a contract for proposed car works for the Southwestern Railway; the building will be of structural iron and steel, equipped with daily capacity of 40 complete freight cars and special cars. About $300,000 will be invested, it is reported.

SAN ANGELO, TEX.—The San Angelo Ice & Power Co. has awarded a contract to the RUEMEL-DRAWLEY MFG. CO., St. Louis, Mo., for improvements to the ice and cold storage plant, at about $26,000.

MARSHALL, TEX.—The shops of the Texas & Pacific Railroad at Marshall are to be enlarged at a cost of about $100,000. The new buildings will be of stone and brick. E. Loughery is Engr., at this place.

WACO, TEX.—The Torbett & Gerwood Co., capital $25,000, has been chartered for the manufacture of sheet metal roofing, etc. Incorporators: W. C. Torbett, Geo. F. Germond, R. L. Hollan, all of Waco.

ALBUQUERQUE, N. MEX.—It is stated that the Rio Grande Woolen Mills will erect a plant here, to cost about $1,000,000. John H. Bearup is Pres.

NORTH YAKIMA, WASH.—The Yakima Brewing Co. has purchased site, and will commence the construction of a 2-story brick and stone building.

PALOUSE, WASH.—The Palouse Pottery plans to expend about $25,000 in extensions to its plant in this city.

CHEHALIS, WASH.—The Chehalis Furniture Co. has secured a site and will construct an additional plant. Sherman Murphy and E. G. Whitmarsh are interested.

CHEHALIS, WASH.—It is stated that the American Flax Fiber Co., of San Francisco, will build a factory at this place this spring to handle flax. Cost will be from $35,000 to $45,000.

CENTRALIA, WASH. — The Centralia Shingle Co. will rebuild its plant at a cost of $10,000. J. P. Currier is Gen. Mgr.

PORTLAND, ORE.—It is stated that E. L. Trent, Local Mgr., is considering plans for a 4-story hardware and implement warehouse for the Parlin Orendorff Co.

A company is being formed to erect a plant for the manufacture of cement bricks here. Frank A. Sweeney is interested.

SAN LUIS OBISPO, CAL.—The Gracicoa Oil Co. is to build a refinery at San Luis Obispo, and bids for the construction of a plant will be asked at once. Estimated cost, $300,000. L. A. Phillips is Mgr.

MONCTON, N. B.—The car works of the Intercolonial Railway at this place were burned out at a loss of about $1,500,000. D. Pottinger is Gen. Mgr., at this place.

MISCELLANEOUS CONTRACTS.

The names of parties awarded contracts are printed in capital letters.

BULKHEAD, DREDGING. — Baltimore, Md.—See under Streets and Roads.

DREDGING.—Grand Rapids, Mich.—Bids are asked until 10 a. m., March 14, for dredging harbors on east shore of Lake Michigan. Col. M. B. Adams, Engrs.

DREDGING.—New London, Conn.—Bids are asked until noon, March 31, by Lieut.-Col. C. F. Powell, for dredging in Thames River, Conn. (Advertised, Engineering News.)

LOCK GATES.—Pittsburg, Pa.—Bids are asked until noon, March 30, for building five pairs of lock gates and anchorages. Major Wm. L. Sibert, Engrs. (Advertised, Engineering News.)

BREAKWATER.— Cleveland, O.—Bids are asked until 2 p. m., March 16, for construction of a portion of the east breakwater at Conneaut Harbor, O. Lieut.-Col. Dan C. Kingman, Corps of Engrs.

DITCH.—Albert Lea, Minn.—We are officially informed that CALLAHAN & CO., Omaha, Neb., has been awarded contract for ditch No. 12, Freborn County, at 11¾ cts. per cu. yd. Total cost, $25,058.

STREET SIGNS.—Schenectady, N. Y.—Bids are asked until 2 p. m., April 9, by the board of contract and supply for furnishing and erecting street signs. Charles O. Dunning, Clk. (Advertised, Engineering News.)

DAM.—Denison, Tex.—We are officially advised that the Denison Rod & Gun Club has let contract to PARKS & CORD, of Dallas, Tex., for building an earthen dam. Cost, $8,000. C. D. Kingston is Pres. Noted on Feb. 1.

DREDGING.—New Orleans, La.—Bids are asked until 11.30 a. m., March 28, for dredging channels at mouth of Calcasieu River, La., and for building rock revetment. Capt. J. F. McIndoe, Engrs. (Advertised, Engineering News.)

SPILLWAY, ETC.—San Francisco, Cal.—Bids are asked until noon, March 30, for constructing spillway and placing large rock at Hallwood, Yuba River, Cal. Capt. Wm. W. Harts, Engrs., Flood Bldg., San Francisco. (Advertised, Engineering News.)

WHARF.—Bridgeport, Conn.—G. W. ROGERS & CO., 44 Broadway, New York, have secured the contract for constructing new wharf for the N. Y., N. H. & H. R. R. Co. on the harbor front, between Wall and Union Sts., at about $40,000.

READERS' WANTS FOR THOSE IN THE MARKET

The readers of ENGINEERING NEWS are constantly in the market for great quantities of machinery, tools and general supplies. While our thousand advertisers are usually able to furnish the material desired, yet there are many things wanted by our readers that are not advertised, although connected with engineering and contracting directly or indirectly. This department (R-W) is for this class of inquiries, and we urge our readers to keep us informed. Enclose five cents in stamps and we write to a number of leading manufacturers without further cost. When writing to our advertisers, who are the leaders in their respective lines, **mention Engineering News.** Have you a copy of our Buyers' Guide? **Engineering News Can Help Buyers.**

SCRAP MICA.—Middletown, Ct.—C. H. Blatchley, of Middletown, writes us for the names of dealers in scrap mica.

MACHINERY.—New York.—The Agents Goods Co., 2 Elm St., writes us that it is in the market for certain machinery.

WOOD BLOCK PAVING.—Rochester, N. Y.—Jas. T. Holahan & Co., Contractors, write us that they wish the names of makers of wood paving block.

WOOD SPLITTERS.—Philadelphia, Pa.—Geo. Weis, 1143 North Front St., writes us that he wants the names of firms who make wood splitters, used in kindling wood establishments.

IMPORTERS OF STRUCTURAL STEEL.—Clinton, Iowa.—A correspondent asks for the addresses of importers of structural steel. Address E. H. T., care Engineering News, New York.

FELT.—McKeesport, Pa.—Edward Gilchrist, 319 Shaw Ave., writes us that he wants the addresses of makers of compressed felt ¼-in. thick by 5 ins. wide, and about 6½ ins. long.

STARCH MILLS.—Mexico.—A. W. Faithfull, Richmond Court, of Brookline, Mass., writes us that he wishes the names of firms who erect starch mills, as it is proposed to build such plant in Mexico.

POWER SCRAPERS.—Potter Valley, Cal.—The Eel River Power & Irrigation Co., Ukiah and Potter Valley, Cal., writes us for the addresses of makers of power scrapers. Address Warren Egbert, Potter Valley.

ROAD MACHINERY.—Montgomery, Ala.—J. T. Bullen, Co. Engr., writes us that he wishes trade catalogues of road-making machinery, etc., as it is intended to do considerable road work.

BRIDGES, CEMENT, CONCRETE MIXERS, CONCRETE MOLDS, ETC.—Howard City, Mich.—The Lisk Bridge & Construction Co., E. E. Filkins, Howard City, writes us that it is in the market, quick delivery, of the above mentioned supplies.

WATERPROOFING FOR CONCRETE.—Buffalo, N. Y.—The Buffalo Fdy. Co., E. G. Rippel, Vice-Pres., writes us for the names of makers of a waterproofing paint for concrete. The company proposes to build a concrete tank, in which it is intended to install a furnace.

SMALL GASOLINE PUMPS.—Pittsburg, Pa.—Thos. McNeil, Pres., Jas. McNeil & Bro. Co., writes us that he wants a small pump for pumping a water supply for his farm. The water is to be raised about 150 ft. Information regarding gasoline motor engines is wanted.

SMOKE PREVENTION, ETC.—Salt Lake City, Utah.—L. C. Kelsey, Cy. Engr., writes us that information is wanted regarding different devices for smoke prevention, the first cost, expense of maintenance, etc. The names of companies making such devices are also wanted.

ROAD MACHINERY.—Waycross, Ga.—The Deen Realty & Improvement Co., C. J. Thomas, Secy. (and City Engr. of Waycross), writes us that it will soon be ready to purchase all kinds of road-making machinery, as it is proposed to build or grade about 100 miles of roads. G. W. Deen, Mgr.

LEAD FURNACE.—Bluefield, W. Va.—The Va. & W. Va. Iron, Coal & Coke Co. writes us that it is in the market for a lead furnace of a capacity of about 8 to 12 tons of ore and clay. The company also wishes to engage a competent manager, experienced in smelting and refining lead and zinc ores.

AIR LIFT WELL MACHINERY.—Chicago, Ill.—K. Hojgaard, 1635 Wrightwood Ave., writes us that a concern for which he is acting as consulting engineer is considering the use of compressed air lift pumps for bored wells, used for irrigation. Information regarding such machinery, the cost of installation, etc., is wanted.

LIMESTONE QUARRY.—New York, N. Y.—J. L. Gazan, 220 West 107th St., informs us that he wishes to purchase, or lease, a limestone quarry, with a factory located on it. The quarry must be on the Hudson River between Yonkers and Catskill, N. Y.

SURVEYING INSTRUMENTS, MACHINERY, ETC.—Ithaca, N. Y.—We are informed that the College of Civil Engineering, Cornell University, requests catalogues of engineering instruments, machinery and supplies. It is intended to place them on file in a large case, accessible to students who will be encouraged to make themselves acquainted with the types of the makers.

AUTOMATIC COAL POCKETS.—New Brunswick, Can.—A. R. Crookshank, Res. Engr. N. B. Coal & Ry Co, Norton, N B., writes us that he is desirous of getting information in regard to a cheap style of automatic coal pocket of about 50 tons capacity. The coal is to be dumped into the bin or pocket from a hopper car, on an overhead trestle and delivered to the locomotive tender by a vertically swinging chute on the opening of the pocket door.

AERIAL WIRE TRAMWAYS (5,000 ft.), CRUSHING MACHINERY, CYANIDE PLANT, GOLD DREDGES, ELECTRIC DRILLS, ELECTRIC OR STEAM SHOVELS, STAMP MILLS, TURBINES, ORE MILLS, HYDRO-ELECTRIC POWER PLANTS, ETC.—Nicaragua, C. A.—J. Francis Le Baron, Consult. Engr., U. S. & N. Co., and La Luz y Los Angeles Mines, care Senor don Adolfo Diaz, Bluefields, Nic., C. A., writes us that he is in the market for the above, and wishes to receive catalogues, etc., at once.

AIR COMPRESSORS, DRILLS, ORE BUCKETS, CARS AND CAGES, CRUSHING MACHINERY, ETC.—Mexico.—C. C. Goldsberry, Pres. and Supt. Mexican Mining & Development Co., Inc., Ocatlan, Oaxaca, Mex., owners of the Guebesho Mines, near Ocatlan, writes us that it is proposed to buy the above mentioned supplies at once in connection with the concentration of copper, lead and zinc sulphide ores, as this makes it necessary to put in magnetic separators. The former may be steam or producer gas. The home office of the company is at Cabool, Mo. C. E. Davis, Secy.

POWER FOR MANUFACTURING PLANTS, GAS ENGINES, ETC.—Canada.—Information is wanted immediately, regarding modern plants for generating power for large manufacturing plants. The matter of suction gas engines has been called to the attention of our correspondent. It is proposed to install an electric motor and it is desired to know how gas engines may be adapted for electric power generation. Prices are wanted on two 250-HP. engines, direct connected to 250-HP. current generator. The plant for which this machinery is wanted was damaged by fire a few weeks ago and is being rebuilt. Address F. H. E., care Engineering News, New York.

COMBINATION COMPRESSOR AND CENTRIFUGAL PUMP, ETC.—Bridgeport, Conn.—The Bridgeport Hydraulic Co., D. H. Hall, writes us that the company is thinking of fitting up a wagon with a small compressor and a centrifugal pump, the same to be run by a gasoline engine. The idea is to have this outfit built as light as possible so that one horse could draw it easily. The pump would be used to pump out pipe ditches, where there is considerable water to contend with, in making street connections, etc. It would take the place of the ordinary diaphram pump which the company now uses. The compressor would be used principally for calking joints on new large pipe lines. This would be on about the same plan as a "Riveter," only not so powerful. "Possibly there is something of this nature on the market, but we do not know of it. If you could suggest our scheme to some concern who would take the matter up with us, or refer us to a manufacturer of articles of this nature, we shall appreciate it very much indeed."

DREDGING.—Cleveland, O.—The board of public service has awarded the contract for dredging the Cuyahoga River to GRAVES & STEPHENS, of Indianapolis. Most of the dirt will be removed to the foot of East Ninth St. The contract price is $50,000.

CEMENT.—Wheeling, W. Va.—Bids are asked until 11 a. m., March 27, for furnishing and delivering about 15,000 bbls. of American Portland cement at dams Nos. 13 and 18, Ohio River. Major Geo. A. Zinn, Engrs. (Advertised, Engineering News.)

BRICK, TERRA COTTA.—Lowell, Mass.—The Conners Bros. Construction Co., Lowell, Mass., desires to let the laying of about 3,000,000 brick and a large amount of terra cotta. Work can start at once. It is located at Utica, N. Y. (Advertised, Engineering News.)

REFRIGERATING APPARATUS.—Poughkeepsie, N. Y.—We are officially advised that contract has been awarded to STEELE & CONDICT, 70 Pearl St., Jersey City, N. J., for refrigerating apparatus at Hudson River State hospital, at Poughkeepsie. T. E. McGarr is Secy. State Comn. in Lunacy.

CANAL.—Belle Fourche, S. Dak.—The Secretary of the Interior has granted an extension of 90 days' time to S. R. H. ROBINSON, for construction of schedule 1, main canal Belle Fource Project, S. Dak., making the date for completion, May 1, instead of March 1, 1906, as formerly fixed in the contract.

SNAGBOAT.—Dallas, Tex.—We are officially advised that the following bids were received on Feb. 19 for constructing a complete stern-wheel snagboat, delivery to be made at Fulton, Ark.: M. A. Sweeney Shipyard & Foundry Co., Jeffersonville, Ind., $21,840; E. J. Howard, Jeffersonville, Ind., $22,500.

BRICK.—Philadelphia, Pa.—We are informed by Thomas J. Mooney, 4138 Market St., Philadelphia, that he is in the market for 5,000,000 salmon bricks, 600,000 stretchers or straight hard, 300,000 face bricks, f. o. b. cars Philadelphia. He will pay cash and fair price for prompt delivery, 100,000 per week.

STEEL COAL BARGES.—Baltimore, Md.—We are informed by the Consolidation Coal Co., of Baltimore, that contract has been awarded to the NEW YORK SHIPBUILDING CO., of Camden, N. J., for the construction of two steel coal carrying barges of the capacity of 3,000 tons each. W. L. Andrews is Mgr. of Transportation.

STEEL LOCK GATES.—Nashville, Tenn.—The following are the bids opened on Feb. 8 by Major H. C. Newcomer, Corps Engrs., U. S. A., for the construction, delivery and erection of two steel lock gates and construction and delivery of filling valves, etc., at Lock No. 21, Cumberland River, above Nashville: Port Huron Shipbuilding Co., Port Huron, Mich., $17,900; Fred. W. Moore, Milwaukee, Wis., $28,000; A. M. Bowman & Co., Pittsburg, Pa., $21,720; Penn Bridge Co., Beaver Falls, Pa., $23,469, and Monad Engineering Co., New York, N. Y., $24,210.

STONE WALL.—New York, N. Y.—We are officially advised that O'BRIEN BROS., 54 South St., were awarded contract for building a dry stone wall on top of the existing stone embankment at the easterly side of Riker's Island, East River, at $1.43 per cu. yd. Est. quantity is 15,000 cu. yds. J. A. Bensel is Comr. Dept. of Docks and Ferries.

DITCH.—Sioux City, Ia.—Contracts for constructing the Farmers ditch are reported to have been awarded on Feb. 14 as follows: to CALLAHAN BROS. & KATZ, of Omaha, Neb., for Sec. one, 8 cts. per cu. yd.; Secs. two and eight, 8.25 cts.; Sec. three, 8.75 cts., and Secs. four and five, 11 cts. To BETTS BROS., of Sioux City, Secs. seven and ten, 11.75 cts. per cu. yd., and to FRED. M. CRANE, of Little Sioux, Ia., for Secs. six, nine, eleven, twelve and thirteen, 11.4 cts per cu. yd., and Secs 14 to 20, 9.9 cts. Total cost of work will be about $180,000.

DITCH, RESERVOIR.—Lewiston, Idaho.—Date for receiving bids by the Waha Lewiston Land & Water Co., at Lewiston, Idaho, has been extended from Feb. 28 to March 31, for the construction of 18 miles of flood-water, catchment ditch, four miles of main supply ditch and two storage reservoirs, situated on Craig Mountain, Nez Perce County, Idaho. This work involves the handling of some 310,000 cu. yds. of earth; 258,000 cu. yds. of rock and construction of about 18,000 cu. yds. of concrete and other masonry, and about 4,000 lin. ft. of tunnels. Walter H. Graves, Engr. (Advertised, Engineering News.)

WHARF.—Bremerton, Wash.—Bids are asked by Bureau Yards and Docks, Washington, D. C., until 11 a. m., March 31, for the construction of a timber wharf about 57 ft. wide by 502 ft. long, at the Puget Sound Navy Yard, Bremerton. The piles will be first growth Douglas fir, creosoted, 16 lbs. per cu. ft. The deck of the wharf will be constructed of 4 × 10-in. Douglas fir; a railroad track with 70-lb. A. S. C. E. standard rails will be constructed the full length of the wharf. The estimated cost is $37,000. Specifications are on file at New York office of Engineering News.

WHARF, ETC.—Charleston, S. C.—A pile and timber wharf consisting of an outer wharf about 21 ft. wide and 41 ft. long with an approach about 11 ft. wide by 200 ft. long is to be constructed by contract at the Navy Yard, Charleston, S. C., under supervision of the Bureau of Yards and Docks, Navy Dept. Creosoted yellow pine piles are to be used. The advertisement for proposals should appear in about three weeks, and bids will be opened about the middle of April. The Bureau also has in the hands of the Public Printer a specification for a 3-story brick and steel building at the same navy yard, for use as a storehouse and store keeper's office. Plumbing and drainage, electric conduits and wiring and radiators and heating appurtenances will be included. No elevator will be called for at present. The appropriation available is $98,000. The specification should be ready in about a month for distribution and bids will be opened about the last of April.

SUPPLIES.—Washington, D. C.—Bids were opened Feb. 13, at the Bureau of Supplies and Accounts, Navy Dept., Washington, for various supplies for U. S. Navy Yards. The following bids are of interest to engineers: Installing docking keel blocks in dry dock at the Navy Yard, Portsmouth, N. H.: Snare & Triest, New York, $8,965; O'Brien & Hoolihan Contracting Co., New York, $14,780; C. M. Leech, Boston, $14,979; Wm. Cramp & Sons, Philadelphia, $21,110.

98,800 lbs. of steel castings, for Washington Navy Yard, American Steel Foundries Co., Chester, N. J., $12,231; Bethlehem Steel Co., South Bethlehem, Pa., $15,314; Midvale Steel Co., Philadelphia, $13,833.

In the following list the names of lowest bidders only are given: 127,600 lbs. nickel steel, various sizes: Crucible Steel Co. of America, Pittsburg, Pa., $5,710; 21,000 ft. B. M. white ash, 1 in. to 4 ins.: Henry Sondheimer, Chicago, $1,099; 95,000 ft. B. M. white pine, 1-in. to 4 ins.; Arthur Gamwell, Seattle, Wash., $6,355.

TUNNEL.—Detroit, Mich. — According to the New York "Sun," of Feb. 20, an "advisory board of engineers will receive bids on March 22 for the construction of a tunnel under the Detroit River, from Detroit to Windsor, Canada, for the improvement of the Michigan Central Railroad. The tunnel will be approximately 1½ miles long, approaches and under-river construction, and will be one of the biggest jobs of the kind ever tackled in this country. The advisory board is composed of W. J. Wilgus, Ch. Engr., of the New York Central system; Howard A. Carson, Ch. Engr. of the Boston Transit Commission, and W. S. Kinnear, Assistant General Manager of the Michigan Central. The work will be carried on under the direction of the Detroit River Tunnel Co., which was organized for the purpose. A force of engineers has prepared designs and specifications. The general plan calls for two single track tubes separated by a concrete center wall and lined with concrete. The contract plans offer four designs of tunnel for the part of the work under the river, about one-half mile in length. W. J. Wilgus, Vice-Pres. of the New York Central system, has suggested a new engineering idea which he believes will save time in construction, minimize risk and result in a saving of cost. His plan is to replace the present silt under the Detroit River by impervious concrete, through which, without the use of shields, the inner tubes or tunnel proper may be constructed so as to secure watertightness, continuity of strength and good workmanship. Mr. Wilgus's plan does away with the use of coffer dams. The large amount of concrete to be deposited under water is a distinctive feature of the plan. The concrete will be deposited by divers. The shield plan is similar in its main features to the plan of tunnel construction of the tunnels under the North River."

U. S. POSSESSIONS AND CUBA.

The names of parties awarded contracts are printed in capital letters.

SLIP.—Honolulu, H. I.—Bids are asked until March 30 at the office of C. S. Holloway, Supt. Pub. Wks., for excavating and dredging one-half of the proposed Kilauea St. slip. Plans and specifications may be obtained upon a deposit of $5 at the office of Assistant Superintendent of Public Works.

WHARF SHEDS AND RAILWAY.—Manila, P. I.—Bids are asked until 11 a. m., May 4 for the construction of two steel wharf sheds and wharf railways. Plans and specifications for this work are on file at office of Engineering News, New York. Lt.-Col. W. L. Fisk, Corps Engrs., U. S. A., Dir. Port Wks.

WHARF.—Guantanamo, Cuba.—Plans and specifications are on file at office of Engineering News, New York, for constructing a wharf at the U. S. Naval Coal Depot, Hospital Cay, Guantanamo. Bids are asked until April 9, as advertised in Engineering News. William S. Cowles, Chief of Bureau of Equipment, Navy Dept., Washington, D. C.

SUPPLIES.—Panama.—The Isthmian Canal Commission has issued specifications of date, Feb. 12, for a large quantity of supplies, bids to be opened March 3, 1906. The items of interest to engineers are: pulleys, scales, railroad coupler knuckles and switch-chains, ejectors, faucets, gages, hydraulic and ratchet jacks, vises, twist drills, yellow metal, muntz metal, zinc, rivets, bolts, tacks, nails, brass rods, galvanized iron pipe (50,000 ft.), brass unions, lead traps and bends, engine lathe, forging machine, bending rolls, steel shafting.

WATER SYSTEM.—Manila, P. I.—Under date of Jan. 12, J. F. Case, Ch. Engr. Dept. of Sewer and Water-Works Construction, Manila, writes us that "bids were received on Jan. 2. Four proposals for the complete work were received and two for portions thereof. One proposal, presented by W. J. Schmidt, in the name of the Schaw-Batcher Co., Sacramento, Cal., was rejected by the Municipal Board, because of cabled advices from this company stating that Mr. Schmidt had no authority to bid in their name and that they would not accept the contract. The award of the different sections was made on Jan 9, and under its terms the MATSON, LORD & BELSER CO., of San Francisco, Cal., will construct the reservoir and the dam. The ATLANTIC, GULF & PACIFIC CO. will construct the tunnel, conduit and steel pipe line. The firm of H. W. PEABODY & CO. will furnish the steel plates and rivets." This project was fully noted on Jan. 18 in Engineering News. Itemized prices will be given next week under Contract Prices.

MEXICO.

The names of parties awarded contracts are printed in capital letters.

WATER-WORKS AND SEWERS.—Parral, Chihuahua.—The contract for the construction of complete sewer and water-works systems for this city has been let to McQUATTERS & TRUEHART, of San Antonio, Tex., for $400,000. The SAN ANTONIO SEWER PIPE CO., of San Antonio, obtained the contract for furnishing all of the pipe to be used in the two systems.

FOREIGN CONTRACTS.

(To insure prompt attention, letters upon consular business should be addressed to the American Consul at ——, ——. Such letters are opened and attended to by the person who happens to be in charge of the office. If addressed to the consul by name they are forwarded to him unopened if he should be absent, and a delay thus intervenes; if he should in the meantime have gone out of office they may wholly escape attention.)

HARBOR BASIN.—Bordeaux, France.—Prefecture de la Gironde, Bordeaux: Construction of a basin for Bordeaux harbor is planned.

STEAM HEATING.—Ostend, Belgium.—A contract will be let soon for the installation of a system of low-pressure steam heating for the new post-office of Ostend.

ELECTRIC WORKS.—Palermo, Italy.—The "Societa Giovanni Lacava et figli et Co." is the name of a new company just formed at Palermo for the purpose of constructing and operating electric works in Sicily. Capital, 600,000 francs.

COAL MINES.—Brussels, Belgium.—The question of the concessions for the newly-discovered coal mines in the Belgian Campine is under the consideration of a parliamentary committee, which is expected to submit a report thereon this month.

RAILWAY LOCOMOTIVES.—Roumania.—It is reported that the Roumanian State Railway authorities are about to call tenders for the supply of 50 locomotives and 3,000 railway wagons. E. Miclesco, Bucharest, Roumania, is Dir. General.

ELECTRIC WORKS.—Milan, Italy.—The "Societa Elettrica del Ticino" is the name of a new company which has been formed at Milan for the purpose of producing and distributing electric energy in Vigevano and Mortara. Angelo Bertini is Pres. Capital, 400,000 francs.

MANGANESE MINES. — Haute-Garonne, France.—M. E. Tubeur has obtained the concession for the manganese mines situated in the communes of Boutx, Lez, Argut, etc., arrondissement of St. Gaudens, under the name of the "Usclat Concession."

TIN AND COPPER MINES.—Ille-et-Vilaine, France.—Robert Surcouf and Collet-Pintiaux have obtained the concession of the wolfram, tin and copper mines situated in the communes of Lintre and Parce, arrondissement of Fougeres, under the name of the "Montbelleux Concession."

MINING.—France.—The "Societe d' Exploitation Miniere des Pyrenees" is the name of a new company which has just been formed, the principal promoters being M. Georges Verny and M. de Bout. The object of the company is to exploit the Escoumps concession, situated in the Pyrenees Orientales, the ores of which are of excellent quality.

The "Societe Anonyme Coloniale Miniere" is the name of a new company which has just been formed for the purpose of obtaining the concession and exploiting the mines in the French Colonies. The capital of the company is 200,000 francs. Its headquarters are situated at 30 rue des Bourdonnais, Paris. H. Bousquet, P. Eonnet and J. Jacquet have been appointed managers.

MINING WORK (ENGINEERING OPPORTUNITIES), ETC.—Rhodesia, Africa.—H. W. Peabody & Co., exporters, 17 State St., New York, send us the following letter from Meikle Bros., Gwelo, Rhodesia: "For some years past we have been trying to make Gwelo a center from which the mines in this district could draw their supplies; but unfortunately we have been greatly handicapped in our efforts by their not being in our midst a good firm of engineers who could do repairs and supply the mines with mining and battery requisites. Gwelo is the most centrally situated town in Rhodesia, and has by far the best gold mining area round it. We are 550 miles from Beira Port, 188 from Salisbury, and 113 from Bulawayo, and all the country for 100 miles around is more or less gold bearing. Bulawayo was for a number of years the terminus of the Southern Ry., Gwelo being the inland town, and all the engineering firms doing business in South Africa opened offices and laid down stock at Bulawayo, thereby forcing all the mining community in the country to go to Bulawayo to do their business. Since the reduction of railway rates from Beira, which has diverted most of the trade through that port, Gwelo is in a far better position to compete for the trade of the country than Bulawayo, and any enterprising firm starting here would in a few months capture most of the trade of the country, as they would have the advantage of about ¾ per 100 lbs. in railway rates. We are surrounded by 11 gold belts, on which there are 36 mining propositions working at present, and which we hope to see doubled in the very near future. Our gold output up to very lately has been ¾ of the output of Rhodesia. Besides the gold we have large deposits of chrome iron and antimony to be worked very shortly, a very promising diamond field which has been discovered within 10 miles of the town, and they are erecting a pretty expensive plant we understand there next month. The benefit we should derive from an engineering house starting in our midst is that it would bring all the mining people, who have now to go to Bulawayo, much against their inclination, to Gwelo, which would be an advantage both to us as general dealers and to the mining people, as it would save them thousands of pounds annually in railage, etc. We would therefore be very much obliged if you would suggest to some good firm in that line of business that it would be quite worth their while looking into the matter with a view to starting a branch in our midst."

CIVIL SERVICE EXAMINATIONS

SURVEYOR.—Philippine Service.—The U. S. Civil Service Commission will hold an examination, on March 21, for the position of surveyor in the Bureau of Public Lands, Philippine Service, at $1,400 per year. Forms 2 and 375.

ARCHITECTURAL DRAFTSMAN. — New York, N. Y.—The Municipal Civil Service Commission will hold an examination for the position of architectural draftsman on March 15 and 16 at 10 a. m., $1,500 to $1,800 per year. William F. Baker, Pres.

ARCHITECTURAL DRAFTSMAN. — New York, N. Y.—The Municipal Civil Service Commission will hold an examination for the position of architectural draftsman (designer) on March 21, at 10 a. m., $2,000 to $2,600 per year. William F. Baker, Pres.

CIVIL ENGINEER STUDENT.—Washington, D. C.—The U. S. Civil Service Commission will hold an examination March 21 to fill vacancies in the position of civil engineer student in the office of public roads of the U. S. Department of Agriculture. $50 per month. Form 1312.

SCIENTIFIC ASSISTANT. — Washington, D. C.—The U. S. Civil Service Commission announces examinations to be held April 18 to fill vacancies in the position of scientific assistant, Department of Agriculture, at salaries of from $840 to $1,200 per year. Form 1312.

INDUSTRIAL NOTES.

THE MILLER-COLLINS CO., Contracting Engineers, will occupy their new offices, on the River front, of the Columbia Bldg., 29 Broadway, New York.

THE WASHINGTON COAL & COKE CO., Star Junction, Pa., has contracted with Wm. B. Scaife & Sons Co., Pittsburg, for a structural steel boiler house.

FREEMAN C. COFFIN and LEWIS D. THORPE, Civil and Hydraulic Engineers, have formed a partnership, with offices at 502 Cornhill Bldg., Boston, Mass.

THE DOMINION CAR CO., Montreal, Que., is reported to have secured the contract from the C. P. R. R. for 200 steel coal cars, costing in all about $1,500,000. Each will have a capacity of 110,000 lbs., and they will be used in the coal service on the Pt. Burwell-Ashtabula route.

THE H. W. JOHNS-MANVILLE [illegible] New York, has the order for the roofing [illegible] new factories for the Ohio Brass [illegible] Mansfield, O., whose plant was recently burned.

THE STANDARD GAS ENGINE [illegible] Francisco, Cal., has appointed George [illegible] sor, C. E., Jun. Am. Soc. M. E., [illegible] representative, with offices at 514 [illegible] Bldg., Philadelphia.

THE ABBOT-GAMBLE CO., New [illegible] St. Louis, advises that it has been [illegible] the contract for the installation [illegible] ft. of electrical conduit for G. H. [illegible] at Scranton, Pa., work to commence immediately.

DODGE & DAY, Industrial Engineers, [illegible] remove to their new offices, located [illegible] Drexel Building, Fifth and Chestnut [illegible] Philadelphia, in order to be nearer the financial center as well as to obtain commodious quarters.

MESSRS. WILLIAMS & WHITMAN, Civil and Sanitary Engineers, will [illegible] their name to Williams, Proctor & [illegible] Inc.; the combined name being the [illegible] B. Williams, Jr., R. F. Proctor and [illegible] Potts. Mr. E. B. Whitman, who was [illegible] nally of the firm, has severed all connection therewith.

THE CLIMAX STOCK GUARD Co., [illegible] cago, reports that it has an order from [illegible] Pennsylvania R. R. for the cattle guards [illegible] be used on the new electrified division [illegible] W. J. & Seashore R. R., between Cape [illegible] N. J., and Atlantic City. This contract [illegible] for about 30 carloads of "clay" guards, [illegible] the complete installation of the same, [illegible] material, labor and transportation [illegible] furnished by the Climax company, and [illegible] line fully equipped by about June 1.

CONTRACT PRICES.

The names of parties awarded contracts are printed in capital letters.

TUNNEL SEWER.—New York, N. Y. [illegible] were received on Feb. 8 for the construction [illegible] of the storm relief tunnel sewer from [illegible] Webster Ave. sewer, near Wendover Ave., [illegible] the Mill Brook water shed (sewerage district [illegible] No. 33), to the Harlem River, about [illegible] ft. north of High Bridge, 24th Ward, Borough of the Bronx, City of New York, together with all the incidental work. The bidders were: (a) W. J. Flanagan, Yonkers, N. Y.; (b) Gallo Pittelli, 127 Mulberry St.; (c) W. J. Brennan, 755 East 173d St.; (d) [illegible] Loucheim, Mint Arcade Bldg., Philadelphia; (e) S. M. De Pasquale, Williamsbridge, N. Y.; (f) Geo. I. Bailey, 1144 Fulton Ave., Borough of Bronx, New York; (g) James Molloy & Co., Bay Seventh St., Bath Beach, N. Y. The itemized bids are as follows:

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
78,030 cu. yds. of excavation of all kinds	$5.00	$6.20	$7.60	$6.30	$8.20	$6.63	$6.00
5,630 cu. yds. of Class A concrete in place, excepting Class A concrete in shafts	8.00	12.00	11.00	11.00	7.75	8.60	8.00
270 cu. yds. of Class B concrete in place	7.00	12.00	10.00	7.50	6.25	6.30	6.00
25 cu. yds. of Class C concrete in place, excepting Class C concrete in shaft house	25.00	25.00	25.00	13.00	7.00	11.00	15.00
13,670 cu. yds. of Class D concrete in place	7.50	12.00	10.00	10.00	6.80	9.50	8.00
50 lbs. of ¼-in. steel bars	.03½	.04	.05	.04	.04	.06	.02½
110 lbs. of ⅜-in. steel bars	.03½	.04	.05	.04	.04	.06	.02½
10,230 lbs. of ½-in. steel bars	.03½	.04	.04	.04	.04	.06	.02½
1,780 lbs. of ⅝-in. steel bars	.03½	.04	.04	.04	.04	.06	.02½
6,310 lbs. of ¾-in. steel bars	.03½	.04	.04	.04	.04	.06	.02½
1,910 lbs. of ⅞-in. steel bars	.03½	.03½	.04	.04	.04	.06	.02½
269,845 lbs. of 1-in. steel bars	.03½	.03½	.04	.04	.04	.06	.02½
100 lbs. of 1⅛-in. steel bars	.03½	.03½	.04	.04	.04	.06	.02½
53,750 lbs. of 1¼-in. steel bars	.03½	.03½	.04	.04	.04	.06	.02½
2,715 lbs. of 1⅜-in. steel bars	.03½	.03½	.04	.04	.04	.06	.02½
97,925 lbs. of 1½-in. steel bars	.03½	.03½	.04	.04	.04	.06	.02½
Shaft No. 1 and appurtenances, complete excepting excavation of all kinds for same, and excepting timber left in work as sheeting, shoring or bracing	7,500.00	2,000.00	5,000.00	2,500.00	921.00	3,000.00	2,500.00
Shaft No. 2 and appurtenances, complete, excepting 24-in. c.-i. pipe and concrete surrounding the same, and excepting excavation of all kinds, and excepting timber left in work as sheeting, shoring, or bracing	15,000.00	3,500.00	5,000.00	5,000.00	2,727.00	2,000.00	4,000.00
Shaft House No. 1 and appurtenances, complete	2,500.00	1,600.00	2,500.00	2,000.00	1,038.00	1,000.00	2,500.00
Shaft House No. 2 and appurtenances, complete	2,500.00	1,600.00	2,500.00	2,000.00	1,038.00	1,000.00	2,500.00
184 net tons (2,000 lbs.) of structural steel, excepting all structural steel in shafts and shaft houses	80.00	90.00	90.00	72.00	70.00	90.00	90.00
4,000 lbs. of wrought iron, excepting all wrought iron in shafts and shaft houses, and excepting all wrought iron used in framing and fastening all piling and timber	.06	.05	.07	.10	.03	.10	.04½
22,000 lbs. of cast iron, including new manhole heads, covers, etc., and excepting all cast iron in shafts and shaft houses	.04	.04	.07	.04	.03	.10	.02½
8,050 sq. ft. of galvanized wire netting, excepting in shaft houses	.10	.05	.10	.08	.30	.50	.05
930 sq. yds. of waterproofing	2.00	2.00	2.00	.75	1.00	2.00	1.50
4 gates and appurtenances in Webster Ave. gate chamber, complete, in place	600.00	500.00	1,200.00	400.00	150.00	250.00	250.00
13,500 lbs. of 24-in. c.-i. pipe	.04	.04	.04	.03	.02	4.00	.03
700 cu. yds. of broken stone for foundation	2.50	3.00	2.00	1.50	2.00	2.00	1.00
240 cu. yds. of dry rubble masonry	4.00	4.00	3.00	1.00	2.50	2.00	2.00
675 cu. yds. of rubble masonry in mortar	6.00	10.00	8.00	3.00	5.65	6.00	3.00
3 cu. yds. of granite masonry	100.00	70.00	60.00	50.00	40.00	100.00	60.00
1,500 lin. ft. of 3-in. drain pipe	.25	.10	.30	.05	.06	.15	.15
3,000 lin. ft. of 12-in. drain pipe, including broken stone cradle in rock	1.00	1.00	2.00	1.00	.47	1.00	2.00
11,000 lin. ft. of piles, below cut-off, including all wrought iron and steel and steel chain used in framing and fastening, and including cast-iron shoes as required	.30	.50	.60	.40	.30	1.20	.35
218,000 ft. B. M. of timber for foundations and for sheeting, shoring and bracing, if left in work, and including all wrought iron and steel used in framing and fastening	50.00	40.00	60.00	70.00	40.00	50.00	30.00
4,500 cu. yds. of embankment, including riprap, sodding and gutters where required	1.00	1.00	3.00	.40	1.00	1.00	.30
40 lin. ft. of brick sewer, 6 ft. 1½ ins. × 6 ft. 6 ins., to be rebuilt, exclusive of extra rubble masonry foundation	20.00	30.00	25.00	15.00	7.00	40.00	25.00
40 lin. ft. of brick sewer, 3 ft. in diameter, to be rebuilt, exclusive of extra rubble masonry foundation	15.00	20.00	20.00	5.00	6.50	30.00	20.00
40 lin. ft. of brick sewer, 2 ft. 6 ins. in diameter, to be rebuilt, exclusive of extra rubble masonry foundation	10.00	15.00	15.00	5.00	6.00	25.00	18.00
2 brick manholes to be rebuilt	100.00	50.00	100.00	50.00	75.00	75.00	60.00
Totals	$635,845	$800,547	$904,187	$768,816	$844,606	$799,899	$710,071

WATER MAINS.—Providence, R. I.—Bids were received on June 24 by the Department of Public Works, Walter F. Slade, Comr., for laying a 42-in. water main, in four sections, from the Scituate reservoir to the city. The bidders submitted the itemized bids subjoined. (a) F. A. GAMMINO, Providence, R. I., awarded contract for section one; (b) T. Gill & Co., 88 Broad St., Boston, Mass.; (c) Daniel A. Dorcy & Co.; (d) FREDERICK E. SHAW, Providence (awarded contract for section three); (e) George R. Newman; (f) BRUNO, SALOMONE & PETTITI, East Boston, Mass. (awarded contract for section two); (g) Edmund B. Roberts; (h) CHARLES CRANKSHAW, Providence (awarded contract for section four):

BIDS RECEIVED JUNE 24, 1909, BY THE DEPARTMENT OF PUBLIC WORKS, PROVIDENCE, FOR LAYING A 42-IN. WATER MAIN IN FOUR SECTIONS.

	(a)	(b)	(c)	(d)	(e)	(f)
Section One.						
Laying 8,240 ft. 42 in. pipe	$1.50	$2.21	$3.00	$1.50	$1.74	$1.65
Setting 3 12 in.	2.00	15.00	5.00	3.00	1.50	1.50
Setting 13 8 in.	2.00	10.00	5.00	2.50	1.50	1.00
Excavating 50 cu. yds. rock (covered)	3.00	5.00	6.00	2.50	2.50	3.50
Excavating 50 " " (uncovered)	2.00	4.00	5.00	2.00	2.50	3.00
Excavating 50	4.00	9.00	5.00	2.00	4.50	6.00
10 cu. yds. co						
Hauling 2,422 tons pipe from yard	1.25	1.05	2.00	{*1.15 / †1.40}	1.25	1.15
Hauling 32 tons specials from depots	1.25	1.00	2.00	.50	.75	1.15
Time bid, days	85	90	100	45	50	75
Totals	$15,749	21.500	30,308	16,053	17,708	16,820
Section Two.						
Laying 7,472 12 in. pipe	$1.95	$2.33	$2.26	$1.85	$1.94	$1.80
Laying 1,05 12 in. pipe	.35	.74	.64	.40	.45	.45
Setting 1 12 in. gate	2.50	15.00	5.00	3.00	1.50	1.00
Setting 15 8 in. "	2.25	10.00	5.00	2.50	1.50	1.00
Setting 2 6 in. "	2.00	10.00	5.00	2.00	1.00	1.00
Excavating 10 cu. yds. rock (covered)	8.00	5.00	6.00	3.50	10.00	3.50
Excavating 10 " " (uncovered)	3.00	4.00	5.00	3.00	10.00	3.00
Excavating 10	4.00	9.00	5.00	3.00	4.50	6.00
20 cu. yds. concrete						
Hauling 2,33 tons pipe from yard	1.00	.95	.80	{*1.05} {†1.30}	1.00	.90
Hauling 60 tons specials from depot	1.00	1.05	1.00	.50	.70	.90
Time bid, days	95	60	75	60	50	75
Totals	$17,558	20,918	19,783	17,472	17,656	16,276
Section Three.	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Laying 4,962 ft. 42 in. pipe	$1.90	$2.29	$2.10	$1.50	$1.70	$1.80	$2.39
Laying 76 ft. 30 in. pipe	1.50	2.00	2.00	1.00	1.60	1.50	1.39
Laying 3,116 ft. 24 in. pipe	1.25	1.47	.95	.75	.85	.80	1.15
Setting 1 24 in. gate	3.50	25.00	5.00	6.00	5.00	5.00	6.00
Setting 1 24 in. "	2.00	10.00	5.00	2.50	1.00	1.00	2.00
Setting 12 8 in. "	2.00	10.00	5.00	2.00	1 00	1.00	1.60
Setting 1 6 in. "	2.00	10.00	5.00	2.00	1.00	1.00	1.60
Excavating 10 cu. yds. rock (covered)	3.00	5.00	6.00	2.50	3.00	3.50	3.50
Excavating 10 " " (uncovered)	2.00	4.00	5.00	2.00	3.00	3.00	3.50
Excavating 10							
Hauling 1,865 tons pipe from yard	.90	.85	.75	{*.95} {†1.20}	.90	.65	1.15
Hauling 50 tons specials from depot	.90	.70	1.00	.50	.75	.65	.50
10 cu. yds. concrete	4.00	9.00	5.00	2.00	4.50	6.00	6.00
Time bid, days	90	60	60	43	50	75	100
Totals	$15,284	18,055	15,214	12,224	13,047	12,929	17,883
Section Four.	(a)	(b)	(c)	(d)	(e)	(g)	(h)
Laying 3,100 ft. 16 in. pipe (shallow)	$0.50	$0.94	....	$0.40	$0.57	.....	.....
Laying 3,100 " " (deep)	.60	.98	.70	.50	.62	$0.50	$0.40
Laying 106 ft. 12 in. pipe	.30	.74	.64	.35	.45	.38	.40
Laying 65 " 8 " "	.25	.50	.50	.30	.40	.30	.35
Excavating 20 cu. yds. rock (covered)	3.00	5.00	6.00	2.50	3.00	5.50	4.00
Excavating 20 " " (uncovered)	2.00	4.00	5.00	2.00	3.00	5.50	3.00
10 cu. yds. concrete	4.00	9.00	5.00	1.00	3.00	5.00	5.00
Time bid, days	50	20	40	3	15	30	30
Totals	$1,738	3,295	2,546	1,397	1,991	1,880	1,495
	‡$2,048	‡3,419	.....	‡1,707	‡2,146	.....	.....

*If four sections are awarded. †If individual section is awarded. ‡Deep cut.

*CANAL.—Roswell, N. Mex.—Schedule is here given of itemized prices submitted for the construction of canals and laterals about eight miles southwest of Roswell, in connection with the Hondo Project of the U. S. G. S. Reclamation Service. Bids were received on Feb. 1 and contract was awarded to T. F. CAZIER. The bidders were: (1) T. F. Cazier, of Roswell, N. Mex., and (2) Wood, Bancroft & Doty, Omaha, Neb., as follows:

	(1)	(2)
72,000 cu. yds. excvtn, class 1	$0.14	$0.17
200 cu. yds. excavat'n, class 2	0.50	0.55
200 cu. yds. excavat'n, class 3	1.00	1.00
1,000 cu. yds. overhaul	0.015	0.015
28 miles laterals, 2 ft. bottom width	140.00	225.00
Total	$10,115	$14,315

TRADE PUBLICATIONS.

COMPLETE POWER PLANTS.—A. D. Granger Co., 95 Liberty St., New York City. Paper; 9 × 6 ins.; pp. 24; illustrated.

This bulletin is published for the purpose of presenting to prospective purchasers the many desirable features and advantages to be obtained from placing all contracts for the apparatus entering into the installation of a complete steam or electric plant with one company.

STEAM HYDRAULIC.—Craig Ridgway & Son Co., Coatesville, Pa. Paper; 9 × 12½ ins.; pp. 4; illustrated.

This is a hydraulic tank making use of an intermediate layer of air between the steam and the water which is said to prevent the condensation of the steam. It is claimed also that the energy consumption is proportional to the load on the lift or the work done.

STEAM BOILER PLANT ACCESSORIES.—Alberger Condenser Co., 95 Liberty St., New York City. Paper; 6 × 9 ins.; pp. 36; illustrated.

This publication is especially devoted to the Wainwright evenflow feed water heaters and expansion joints, but it also contains illustrations of barometric and surface condensers, cooling towers, pumping engines and vacuum pumps. The feed-water heaters have tubes of copper which are corrugated for the purpose of giving the flowing water a tumbling motion, bringing more water in contact with the conducting surface and thus increasing the amount of heat absorbed.

For other Proposal Advertisements see pages 43, 44, 45, 46, 47, 48, of Advertisements and Construction News page 82.

SUBSTRUCTURE AND SUPERSTRUCTURE ROLLING LIFT BRIDGE.

Office County Commissioners of Essex County, Salem, Mass.

Sealed proposals for the construction of the Substructure and Superstructure of a Rolling Lift Bridge, 48 feet center to center of main bearings, over the New Canal, in Gloucester, Mass., will be received at the office of the Commissioners of Essex County at the Court House, Salem, until 10 o'clock A. M., Wednesday, March 14th, 1906.

Each proposal must be accompanied by a certified check for five thousand ($5,000) dollars, payable to the order of the Treasurer of Essex County, and a bond will be required for the faithful performance of the work in the sum of forty per cent. of the amount of the contract.

Plans and specifications may be obtained from the Clerk of the Commission.

The right is reserved to reject any and all bids.

9-1t JAMES P. HALE, Clerk.

STREET SIGNS.

Schenectady, N. Y.

Sealed proposals will be received by the Board of Contract and Supply of the City of Schenectady, N. Y., until 2 P. M., Monday, April 9th, 1906, at their office in the City Hall, for furnishing and erecting suitable signs for designating the names of streets and avenues of the said city. The instructions and bidding blanks may be obtained at the office of the City Engineer, Lewis B. Sebring, Rooms 46-48 Parker Bldg., Schenectady, N. Y. Bidders are requested to furnish sample signs with their proposals, together with a certified check for $100, payable to the City Treasurer, or cash to an equal amount, as a guarantee that the bidder will, if his bid be accepted, enter into a contract with the city and furnish a bond for the faithful performance of the same.

The Committee reserves the right to reject any or all bids.

CHARLES O. DUNNING, Clerk,
9-1t Board of Contract and Supply.

DRAWBRIDGE.

Pedricktown, N. J.

Sealed proposals will be received by the joint committee of the Counties of Salem and Gloucester until 1.30 o'clock P. M., Saturday, March 10, 1906, at the Freeholders' room in the Court House at Woodbury, N. J., for the erection of a new Drawbridge over Old Man's Creek at Pedricktown, N. J.

The bridge will consist of one draw span 103 feet in length, and one approach, or stationary span 62 feet in length.

The substructure, general plan and dimensions to conform to the plans and specifications on file at the office of William M. Carter, Engineer, No. 127 South Broad Street, Woodbury, N. J.

Bidders will furnish with bid detail plans and specifications for the superstructure as bid upon. Each bid shall be inclosed in a sealed envelope and delivered to said committee at its meeting at the time and place aforesaid, or may be indorsed "Pedricktown Bridge bid," and addressed to William M. Carter, Engineer, Woodbury, N. J.

The right is reserved to reject any or all bids.

WILLIAM M. CARTER, Engineer.
February 19, 1906. 8-2t

Plans and specifications are on file at the office of Engineering News, 220 Broadway, New York.

LAYING WATER PIPE.

Perth Amboy, N. J.

Sealed proposals will be received at the office of the Board of Water Commissioners, at the City Hall, Perth Amboy, N. J., March 14, 1906, at 8.30 p. m., for laying of about 750 feet more or less of 30-inch water pipe, 450 feet more or less of 10-inch water pipe, 800 feet more or less of 8-inch water pipe, together with the necessary valves and specials at Runyon, N. J., in accordance with specifications prepared by S. J. Mason, 102 Smith Street, Perth Amboy, N. J. A satisfactory bond of $1,000 will be required for the faithful performance of the contract. A certified check for $200 must accompany each bid. The commissioners reserve the right to reject any or all bids.

By order of the Board of Water Commissioners.

ADAM ECKERT, Clerk.
9-1t S. J. MASON, Engineer.

OPEN INTERMITTENT SAND FILTERS.

Springfield, Mass.

Sealed proposals will be received until noon, March 19th, 1906, at the office of the Board of Water Commissioners, for work in connection with the construction of four open intermittent sand filters. Plans may be seen, and copies of the contract and specifications obtained, at the office of E. E. Lochridge, Engineer Water Department, 43 Bridge St., Springfield, Mass., or at the office of Hazen & Whipple, Consulting Engineers, St. Paul Building, New York City.

The work to be done is approximately as follows:

Excavating and placing 40,000 cubic yards of filter sand and earth work.

350 cubic yards of concrete masonry.

Laying 12,750 lineal feet of lateral drains.

Each bid must be accompanied by a certified check for $500, payable to the order of the Board of Water Commissioners.

The right is reserved to reject any and all bids.

E. E. STONE,
C. H. BENNETT,
FRANCKE W. DICKINSON,
Board of Water Commissioners.
9-3t Springfield, Massachusetts.

Plans and specifications may be seen at New York office of Engineering News, 220 Broadway.

U. S. ENGINEER OFFICE, Pittsburg, Pa., Feb. 28, 1906.—Sealed proposals for building five pairs of lock gates and anchorages will be received here until 12 M., March 31, 1906, then publicly opened. Information furnished on application. WM. L. SIBERT, Maj., Engrs. 9-4t

WANTED to let the LAYING OF ABOUT 3,000,000 BRICK and a large amount of terra cotta. Work can start at once. Work is located at Utica, N. Y. Apply

CONNERS BROS. CONSTRUCTION CO.,
9-1t Lowell, Mass.

OFFICE CALIFORNIA DEBRIS COMMISSION, Flood Building, San Francisco, Cal., Feb. 28, 1906.—Sealed proposals for constructing spillway and placing large rock at Barrier, Yuba River, Cal., will be received here until 12 noon, March 30, 1906, and then publicly opened. Information furnished on application. WM. W. HARTS, Capt., Engrs., Secy. 9-4t

NOW READY.

Modern Tunnel Practice

Illustrated by Examples Taken from Actual Recent Work

By DAVID McNEELY STAUFFER
M. Am. Soc. C. E.; M. Inst. C. E.
Vice-President Engineering News Publishing Co.

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THE ENGINEERING NEWS PUBLISHING COMPANY
220 Broadway, New York

PROPOSALS

WATER-WORKS AND SEWERS.

Franklin, Va., Feb. 28, 1906.

Sealed proposals will be received until one P. M., Tuesday, March 27, 1906, for the construction of water-works and sewerage system for the Town of Franklin, Va.

About 350 tons of cast-iron pipe and specials, tower and tank, steam pump and connections, 55 double nozzle fire hydrants, valves and boxes, pipe laying, digging and backfilling.

About 20,000 ft. of 6-in., 8-in., 10-in., 12-in and 15-in. salt glazed sewer pipe; 24 ft. of 16-in., 60 ft. of 12-in. and 12 ft. of 10-in. cast-iron pipe. About 600 Y branches and tees; 50 manholes; 12 flush tanks; 30 lamp holes; 6 hose flush openings.

Send sealed bids to W. T. Pace, marked on outside "Proposals." A certified check for $250.00 must be sent with each bid. Plans and specifications will be ready on the 12th.

Specifications sent on application to the Engineer.

Town Council reserves the right to reject any or all bids.

CHAS. S. YORK,
Consulting Engineer,
1526 E. Biddle St., Baltimore, Md.
9-2t 12-1t

WATER-WORKS.

Glendive, Mont.

Notice is hereby given, That; Sealed proposals for the construction of a water-works system will be received by the City Clerk of the City of Glendive, Montana, until 10 o'clock A. M., of the 19th day of March A. D. 1906, at which time they will be publicly opened and read.

The work will comprise six different portions, as follows:

1st: The furnishing of wood or cast-iron water pipe and special castings for the pipe system.
2d: The furnishing of fire hydrants.
3d: The furnishing of valves and valve boxes.
4th: The pipe laying.
5th: A steam pumping plant.
6th: A 300,000-gal. reinforced concrete reservoir and two 200,000-gal. reinforced concrete settling basins.

Bids will be received for any one or more of the above portions, and the right is reserved to let the work in separate contract as above divided or in one or more contracts as the Common Council may determine, and to reject any and all bids.

A certified check made payable unconditionally to the order of the City Treasurer of Glendive must accompany each bid and must be in an amount equal to 5 per cent. of the amount of the bid.

All bids must be made on blank forms furnished for that purpose.

Plans and specifications and blank forms of proposal may be obtained at the office of the City Clerk and at the office of Loweth & Wolff, Consulting Engineers, First National Bank Building, St. Paul, Minn.

Dated at Glendive, Montana, this 20th day of February A. D. 1906.

By order of the City Council of Glendive, Montana.

(SEAL) HANS J. HALVORSEN,
9-3t City Clerk.

LAYING CAST-IRON PIPE.

Cincinnati, O.

Sealed proposals will be received at the office of the Board of Trustees, "Commissioners of Water-Works," of the City of Cincinnati, O., until 12 o'clock noon of Friday, March 23d, 1906, for the laying of two sections of cast-iron pipe.

The aggregate length of the two sections of the main to be laid is about 11,930 lineal feet of 60-inch cast-iron pipes.

Plans and profiles of the work and copies of the specifications, estimated quantities of the work to be done, form of proposal, forms of bonds, and form of contract, can be secured at the office of the Chief Engineer of the Board of Trustees, "Commissioners of Water-Works."

The bids shall be accompanied with bonds, certified checks, bank certificates of deposit or cash in the sum of $6,000.00 and $5,000.00, respectively, for the acceptance of the contracts, if awarded by the Board of Trustees, "Commissioners of Water-Works."

Bidders must furnish satisfactory evidence of their ability to do the class of work required.

AUG. HERRMANN,
President.

ELMER G. PRIOR,
Acting Clerk. 9-3t

STREET PAVING AND STORM WATER SEWERS.

Spartanburg, S. C.

Sealed proposals, addressed to the City Council, care the City Clerk, Spartanburg, S. C., will be received until 4 o'clock P. M., March 26th, 1906, for furnishing material and labor for paving East Main Street from Liberty Street to Fairview Avenue, North Church Street from Kennedy Place to Cleveland Street, South Church Street from Broad Street to Hampton Avenue, and Walnut Street from Magnolia Street to North Church Street, with Vitrified Brick, Bitulithic or Bituminous Macadam, or Asphalt Block. The surface to be covered is approximately 55,000 square yards. The material to be used will be selected by the City Council after bids are opened.

Sealed proposals will also be received at the above time for furnishing material and labor to construct approximately 50 catch basins, and approximately 12,000 feet of storm sewers.

Plans and specifications may be had by applying to the office of the City Engineer after March 10th, 1906. When requesting specifications bidders will state the kind of pavement they will submit bids for. A certified check for One Thousand ($1,000) Dollars must be deposited with each proposal.

The City Council reserves the right to reject any and all bids.

FRED L. BRYANT,
9-2t City Engineer.
Spartanburg, S. C., February 24th, 1906.

REINFORCED CONCRETE CONDUIT WORK.

Dallas, Texas, Feb. 19, 1906.

Notice is hereby given that sealed proposals, accompanied by specifications, will be received at the office of the undersigned not later than March 20th, 1906, for the repairing of a 42-inch reinforced concrete conduit 13,500 feet long. Information as to its condition will be given upon application at this office.

E. L. DALTON,
9-1t City Engineer.

GRADING, CURBING AND PAVING NORTH PARK AVENUE.

Meadville, Pa.

The Select and Common Councils of the City of Meadville, Pa., will receive sealed proposals up until 8 p. m., Wednesday, March 7th, 1906, for grading, curbing and paving of North Park avenue, from the north side of Chestnut street to the north side of Baldwin street, with asphalt block. Approximately 12,125 square yards of paving; 5,975 lineal feet of curbing, 200 lineal feet of edge stone, 3,470 lineal feet storm sewer, etc.

Said work to be done in accordance with plans now in the office of the City Engineer. Information as to quantities, specifications, bidding blanks, etc., can be had at the office of the City Clerk.

Contractors must furnish all materials in the construction of said work. A bond of sufficient sureties or a certified check made payable to the City Treasurer for the sum of $200.00 must accompany each bid or the same will not be considered. All proposals must be made on blanks attached to specifications, which will be furnished upon application to the City Clerk, and should be marked "Bid for Paving North Park Avenue," and sent to the undersigned. The city reserves the right to reject any and all bids.

H. S. ROBINSON,
9-1t City Clerk.

WATER-WORKS — ELECTRIC PLANT.

Marlow, Ind. T.

Sealed bids will be received and opened by the Mayor of Marlow, Ind. T., Mr. W. B. Anthony, March 21st, 1906, for the material needed in the construction of a water and light system for said town. There will be required boilers, pumps, engine, A. C. generator, switchboard, cast-iron pipe, standpipe, valves and hydrants.

Specifications can be had by addressing the O'Neil Engineering Co., Dallas, Texas.

Bids will be received for material only—money is in the city treasury to pay for material purchased. The right is reserved to reject any and all bids. 9-2t

BRIDGE SUPERSTRUCTURES.

The City of
Department of P
Commissioner's Office
Providence, R. I., Februa

SEALED PROPOSALS, addr
Commissioner of Public Works
ceived at this office until 11 o
Wednesday, March 7, 1906, for
structure to replace the prese
of the Point Street bridge ov
dence River, weight about 58
and the steel superstructure o
field Avenue bridge over the
River, weight about 50,000 p
of these bridges are of plate
struction. Plans and specificat
seen at the office of the Ci
City Hall, where blank forms
proposal and bonds may be obta

Each proposal must be accom
bond or certified check as liqu
ages for failure to execute
within ten days as follows: For
Bridge $1,000, and for Smithf
bridge $500, and a satisfactory
each bridge, equal to one-third
mated value of the work cond
the faithful performance of the
be required of the successful bid

The right to reject any or all
served.

WALTER F. SLADE,
8-2t Commissioner of Public Works.

Specifications may be seen at the office of Engineering News, 220 Broadway, New York.

U. S. ENGINEER OFFICE, New London, Conn., March 1, 1906. Sealed proposals in triplicate for dredging in Thames River, Conn., will be received here until 12 o'clock, noon, March 31, 1906, and then publicly opened. Information furnished on application. C. F. POWELL, Lt. Col., Engrs. 9-4t

SITUATIONS OPEN

WANTED.—Young man with technical education, college graduate preferred, for underground conduit construction in Philadelphia; must have had practical experience in construction work, though not necessarily underground conduit construction. State qualifications, previous experience and age. Address "E. A. 9," Engineering News, New York. 9-3t

WANTED.—A first-class detailer and checker for bridge and structural work; also shop man to make templets and lay out work. Address "R. 9," Engineering News, New York. 9-1t

WANTED.—Assistant experienced in computations for surveys and subdivision of properties, and earth and rock excavation. Address with references, details of experience and salary expected, JOHN F. FAIRCHILD, Engineering Building, Mount Vernon, N. Y. 9-2t

WANTED. — Two experienced structural draftsmen. Write stating experience and salary expected. Address "E. 9," Engineering News, New York. 9-2t

GOOD SALARY and permanent position to offer one or two good draftsmen on structural steel work for bridges and buildings by concern in Eastern Pennsylvania. Only men are desired who are steady and faithful and who are looking for an opening to develop with a growing business. In reply state salary desired and give experience and references. Address "G. B. 9," Engineering News, New York. 9-1t

CIVIL ENGINEER, who is an expert instrumentman. Locaton, Baltimore. State salary desired. Address "R. A. 9," Engineering News, New York. 9-2t

WANTED, IMMEDIATELY.—A computor on land survey computation; calculating boundary lines, areas and lot subdivision. Must be quick and accurate. Location, near New York City. Address, stating age, experience and salary expected, "C. B. 9," Engineering News, New York. 9-1t

BY COMPANY doing reinforced concrete work throughout the country, wanted engineer to take charge of designing department. Only those having large experience in designing all forms of reinforced concrete construction, and competent to get out estimates and plans rapidly and accurately, need apply. Position open immediately, with promise of steady position and assured advancement. Address "L. B. 9," Engineering News, New York. 9-1t

WANTED.—First-class foreman, experienced on steam shovel, dump and track work; long job; must be sober and steady. Apply on work, JERSEY SHORE, PA., Pennsylvania Railroad. 9-4t

WANTED.—As assistant walking boss—a first-class man on steam shovel work, having practical experience with shovels and track work; must be sober, reliable, a hustler and not afraid of work; promotion in view; work in Pennsylvania. Apply, stating age and experience, with reference, to "K. B. 9," Engineering News, New York. 9-4t

Miscellaneous Wants

WANTED.—Small or medium size transit; good make and condition. Also Y or dumpy level of high grade. State particulars and price. "N. Y. 47," care Engineering News, New York. 9-1t

Situations Open

An Advertiser in Philadelphia, Pa., desires a high-grade Engineer to represent them in the city of New York. Must have had considerable experience and large volume of sales. A man who has represented structural steel construction preferred. Only men between 30 and 50 years of age need apply, Application must state experience and volume of sales.

Also two Civil Engineers. Experienced traveling men to represent them on the road. They must be capable of producing results. Reply stating experience and the volume of sales. Address, O B 9, Engineering News, New York.

Applications for above positions will be received until March 31st, 1906. Replies will be confidential.

9-4t